

COUNTY BOROUGH OF ST. HELENS.



Annual Report
OF THE
Medical Officer of Health,
FOR THE YEAR 1935.

FRANK HAUXWELL, M.B., Ch.B., D.P.H.,
Medical Officer of Health,
and School Medical Officer.

St. Helens :
WOOD, WESTWORTH & CO., LIMITED, PRINTERS AND STATIONERS,
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INDEX.

	PAGE
GENERAL STATISTICS	6
STAFF	7
NATURAL AND SOCIAL CONDITIONS OF THE AREA	9
VITAL STATISTICS	11
INFECTIOUS DISEASES.....	23
LABORATORY WORK	34
TUBERCULOSIS	35
VENEREAL DISEASES	45
SUMMARY OF NURSING ARRANGEMENTS, HOSPITALS, AND OTHER INSTITUTIONS AVAILABLE FOR THE DISTRICT	48
MATERNITY AND CHILD WELFARE	52
ORTHOPAEDICS	71
WELFARE OF THE BLIND	74
POOR LAW MEDICAL RELIEF	75
LIST OF ADOPTIVE AND LOCAL ACTS, BYELAWS AND LOCAL REGULA- TIONS AND ORDERS RELATING TO PUBLIC HEALTH, IN FORCE IN THE DISTRICT	78
INSPECTION AND SUPERVISION OF FOOD	80
SANITARY CIRCUMSTANCES OF THE AREA	98
HOUSING	109
HEALTH EDUCATION	117
APPENDIX—Housing Act, 1935	118

Health Committee.

Chairman :

ALDERMAN T. HAMBLETT, J.P.

Deputy-Chairman :

COUNCILLOR EVELYN PILKINGTON, C.B.E., J.P.

THE RIGHT WORSHIPFUL THE MAYOR,
(Councillor A. Dodd, J.P.)

ALDERMAN H. H. PEET, J.P.

COUNCILLOR N. BIRCH, J.P.

„ W. BURROWS, J.P.

„ R. ELLISON, J.P.

„ E. HOUGHTON, J.P.

„ ELLEN McCORMACK.

„ M. McFARLANE, J.P.

„ R. RENNIE.

„ J. THACKRAY, J.P.

„ T. WOODS.

Maternity and Child Welfare Committee.

Chairman :

ALDERMAN T. HAMBLETT, J.P.

Deputy Chairman :

COUNCILLOR EVELYN PILKINGTON, C.B.E., J.P.

THE HEALTH COMMITTEE,

Councillor M. A. Shard and the following co-opted members :—

MRS. H. B. BATES, AND

MRS. B. MCGHIE.

TO THE MAYOR, ALDERMEN AND COUNCILLORS OF
THE COUNTY BOROUGH OF ST. HELENS.

Mr. Mayor, Ladies and Gentlemen,

I have the honour to submit the 63rd Annual Report on the health of St. Helens, being the Report for the year ended 31st December, 1935.

Unfortunately the good health record of 1934 was not continued in 1935. A severe epidemic of whooping cough in the early part of the year was followed by epidemics of scarlet fever and measles in the later months of the year, whilst the increased prevalence of diphtheria which had been noted during the preceding two years was continued with little abatement during practically the whole year. The effect of these epidemics is reflected in the Infant Mortality rate, which increased from the very satisfactory rate of 65.4 per 1,000 births in 1934 to 94.3 per 1,000 in 1935. As is to be expected the General Death Rate was also increased, the adjusted rate for St. Helens being 15 per 1,000 of the population in 1935 as compared with 13.0 per 1,000 in 1934.

It is, however, satisfactory to record that the Maternal Mortality was the lowest since 1923 and the second lowest in the last 20 years, and that the Tuberculosis Death Rate was the lowest yet recorded for the borough and was even lower than that for England and Wales as a whole.

The work of the Department during the year was particularly heavy, partly as a result of the prevalence of so much infectious disease, partly owing to the ever increasing duties put upon the Department and partly owing to the ever necessary need for improvement and expansion. The various expansions and improvements carried out during the year are dealt with in the appropriate sections of the Report, but I might here draw attention to the development of the toddlers clinics, the inauguration of a test feeding clinic, the

increased application of artificial pneumothorax in the treatment of tuberculosis, and the extended bacteriological control of milk supplies.

Progress was also well maintained during the year with the Slum Clearance programme, so that by the end of the year official action had been taken in respect of 208 out of the 374 houses scheduled in the original programme together with 50 houses not included in that programme. In December the overcrowding survey required under the Housing Act, 1935, was commenced. The survey was completed before the end of March of the current year and showed that 8.5% of the houses in St. Helens were overcrowded according to the standards of that Act.

I take this opportunity of thanking members of the Council for the kindness and consideration shown me in the conduct of my work, and especially the Chairman of the Health Committee (Alderman T. Hamblett, J.P.) for his ever ready and generous help and encouragement in dealing with difficult problems. I must also record my hearty appreciation of the loyal and willing service given by every member of my staff.

I have the honour to be,

Your obedient servant,

FRANK HAUXWELL.

July, 1936.

GENERAL STATISTICS.

Area (Acres)	7,950
Estimated Population mid-year 1935	108,100
Number of inhabited houses (end of 1935) according to Rate Books	24,479
Rateable Value	£438,628
Product of a penny rate	£1,699

The Net Cost on the Rates of the various Health Services in St. Helens during the year ended the 31st March, 1936, as compared with the previous year is given below.

	Pence per £	
	1934-35.	1935-36
Isolation Hospital	3.954	4.451
Tuberculosis	6.658	6.479
Maternity and Child Welfare	7.608	8.398
Venereal Diseases .....	.376	.393
Vaccination .....	.345	.342
Food and Drugs Acts .....	.246	.243
Slaughterhouse and Cold Stores .....	.340	.315
Contagious Diseases of Animals .....	.055	.061
General Sanitary and Administrative Charges	5.511	6.312
Sewers .....	.899	1.656
Sewage Disposal	3.375	3.112
Drain Testing .....	.066	.095
Sanitary Improvement .....	.122	.119
Public Conveniences .....	.500	.578
*Collection and Disposal of Refuse	16.312	18.098
*Blind Persons	3.569	3.854
Total Net Cost of Health Services	49.936	54.506

*Under the control of the Cleansing Committee and the Blind Persons Act Committee respectively.

STAFF.

Medical Officer of Health, Administrative Tuberculosis Officer,
Medical Superintendent of Corporation Hospitals, and School
Medical Officer :

Frank Hauxwell, M.B., Ch.B. (Glasgow), D.P.H. (Camb.)

Deputy Medical Officer of Health :

William T. Donovan, M.B., Ch.B. (Liverpool), D.P.H. (Liverpool),
(Resigned June, 1935).

Gerald O'Brien, M.B., Ch.B., D.P.H. (St. Andrew's),
(from July, 1935).

Assistant Medical Officers of Health :

J. S. G. Burnett, M.B., Ch.B., D.P.H. (Glasgow), (Resigned
August, 1935).

Harold C. Calvey, M.B., Ch.B. (Liverpool), D.P.H. (Man-
chester), (from September, 1935).

Gerald O'Brien, M.B., Ch.B., D.P.H. (St. Andrews),
(Appointed Deputy in July, 1935).

Enid M. Hughes, M.B., Ch.B. (Liverpool).

Peter Henderson, M.D. (Aberdeen), D.P.H. (England), (from
December, 1935).

Dental Surgeons :

Adrian G. Batten, L.D.S. (Resigned August, 1935).

Ronald G. Clague, L.D.S.

Arthur N. Leicester, B.D.S. (from December, 1935).

Mary G. Chisnall, L.D.S. (from February, 1935).

Sanitary Inspectors, etc. :

Ernest Sefton (1), (5), (10), (11), Chief Sanitary Inspector.

W. H. Ball (4), (5), (12), Deputy Chief Sanitary Inspector

H. Lowe (4), (6),Sanitary Inspector

W. A. Young (4), (5), (12),do.

C. W. Glover (4), (5), (6), (12),do.

*G. E. Brogan (6), (12),do.

R. E. Smalley (5), (8), (12), (14)do.

R. A. Bull (5), (6), (12)do.

*H. F. Rickett, Assistant Sanitary Inspector.

T. Blashill (1), (5), Superintendent of Public Abattoir.

Matrons of Corporation Hospitals :

Edith Carder, Borough Isolation Hospital and Eccleston Hall Sanatorium.

Eva May Peters, St. Helens Maternity and Child Welfare Hospital.

Health Visitors and School Nurses :

Superintendent : —Eleanor J. Moorehead (2), (3), (7).

Ethel Denman,	(1), (2), (3), (7)	Alice Happold,	(3), (7)
Mary Riding,	(3), (7)	Edith Curran,	(3), (7)
Amy Coates,	(2), (3), (7)	Ellen R. McDonald,	(2), (3), (7)
Emily Corrish,	(2), (3), (7)	Agnes MacDonald,	(2), (3), (7)
Daisy C. Cruickshank,	(3), (7)	Doris Parkinson,	(2), (3), (7)
Nora Hogan,	(3), (7)	*Elsie Worthington,	(2), (3), (7)
Mary Corrish,	(3), (7)	Amanda S. Hume,	(2), (3), (7)
		Nellie Richardson,	(3), (7)

Orthopaedic Nurse :

Isabelle Marvin Corke (9)

Tuberculosis Nurse :

Grace Sumner (7)

Clerk Dispenser and Venereal Diseases Attendant :

Jas. McP. Hutton.

Venereal Diseases Nurse :

Florence Wilkinson (7)

*Resigned during the year.

- (1) Sanitary Inspector's Certificate of the Royal Sanitary Institute.
- (2) Health Visitor's Certificate of the Royal Sanitary Institute.
- (3) Certificate of the Central Midwives Board.
- (4) Sanitary Inspector's Certificate of the Liverpool University.
- (5) Certificate for Meat Inspection of the Royal Sanitary Institute.
- (6) Certificate for Meat Inspection of Liverpool University.
- (7) A trained Nurse.
- (8) Certificate for Sanitary Science of the Royal Sanitary Institute.
- (9) Certificate of Chartered Society of Masseuses, etc.
- (10) Diploma of the Institute of Sanitary Engineers.
- (11) Diploma of the Building Surveyors' Association.
- (12) Sanitary Inspector's Certificate of the Royal Sanitary Institute and Sanitary Inspectors' Examination Joint Board.
- (13) Smoke Inspector's Certificate of the Royal Sanitary Institute.
- (14) General Hygiene and Sanitation Certificate of the Royal Sanitary Institute.

The following are part-time officers :—

District Medical Officers :—J. D. O'M. Poole, M.B., Ch. B. ;
H. A. Lomax, M.B., Ch.B., M.R.C.S., L.R.C.P. ; J. A.
Donnellan, M.B., Ch.B. ; T. R. O'Keeffe, L.R.C.P.,
L.R.C.S., L.R.F.P.S. ; J. G. O'Keeffe, L.R.C.P.,
L.R.C.S., L.R.F.P.S.

Public Vaccinators :—H. B. Bates, L.S.A., L.M.S.S.A. ;
J. S. Fox, M.B., C.M., M.R.C.S. ; P. J. O’Keeffe,
L.R.C.P., L.R.C.S., L.R.F.P.S., L.M.

Physician to the X-ray Department, Tuberculosis Dispensary :
J. Unsworth, M.B., B.S., (Lond.).

Orthopaedic Surgeon :—B. L. McFarland, M.D. (Liverp.),
M.Ch. (Orth.), M.B., Ch.B., F.R.C.S. (Edin.).

Ophthalmic Surgeon :—E. Allan, M.B., Ch.B. (Edin.).

Obstetrician and Gynaecologist:—J. W. Burns, M.D. (Dublin),
B.A., M.B., B.Ch., B.A.O., F.R.C.S. (Edin.)

Public Analyst :—Herbert J. Evans, B.Sc., F.I.C., F.C.S.

Veterinary Inspector :—T. J. Kenny, M.R.C.V.S.
(Died 13/11/1935)

1.—NATURAL AND SOCIAL CONDITIONS OF THE AREA.

PHYSICAL FEATURES AND GENERAL CHARACTER.—St. Helens is situated 10 miles east of Liverpool and 20 miles west of Manchester, and lies on the southern fringe of the Lancashire coal fields. Geologically the soil consists of clay overlying coal measures, and owing to past mining activities some portions of the town are peculiarly susceptible to subsidence. This is particularly so in the Sutton and Derbyshire Hill districts.

The area of the Borough is 7,950 acres and it is estimated that approximately one quarter of this area is occupied by factories and other industrial works, and one quarter by housing ; the remainder is mainly agricultural land and parks.

Housing development has mainly taken place towards the North West and North, and on these sides there is considerable activity in land development.

The district is well supplied with public parks and recreation grounds—both public and private. The Corporation maintain 11 parks and recreation grounds covering approximately 175 acres.

SOCIAL CONDITIONS.—The chief industries of the town are coal mining and glass making.

The average number of persons unemployed in St. Helens and registered at the Labour Exchange during 1935 (as shown by the figures taken on Monday of each week) was 6,977 men, 523 women, and 659 juveniles (total 8,159). The largest number of unemployed men and women was 9,433 in July and among juveniles 824 in September. The total for 1935 shows a decrease from the previous year when the average total number of unemployed persons was 8,678.

The total amount of domiciliary relief granted in St. Helens by the Public Assistance Committee during the year ended 31st March, 1936, was £95,136/16/6d., of which sum £27,809/0/9d. was granted to unemployed men and their families. The corresponding amounts granted in the previous year were £88,515/10/5d. and £29,949/10/3 respectively.

From St. Helens 316 men, 242 women and 190 children were admitted to the Poor Law Infirmary, and 157 men, 55 women and 14 children were admitted to the "House" during the year.

Under the National Health Insurance Act, the total number of insured persons in St. Helens on 1st October, 1935, was 42,087, comprising 32,165 men and 9,922 women, or approximately 39% of the total population. The corresponding figures for 1934 were 32,227 men and 9,835 women.

During 1935 all the instruments at the Victoria Park Observatory were overhauled and re-conditioned or renewed. Some of these instruments had been in use for very many years and opportunity was taken to replace them by newer types. A sunshine recorder was also installed.

Complete records of meteorological conditions in St. Helens during 1935 are not, therefore, available. A rainfall recorder is, however, installed at the Eccleston Hill Waterworks and according to this instrument the rainfall in St. Helens during the year was 36.16 inches. The annual rainfall since 1900 is shown in Table 1.

The special gauge maintained in the centre of the town for the collection and measurement of the amount of atmospheric pollution showed the total solids deposited in St. Helens from the atmosphere during the year ending the 31st March, 1936 to be 17,894 metric tons per 100 square kilometres or approximately 1,596 pounds per acre.

II.—VITAL STATISTICS.

EXTRACTS FROM VITAL STATISTICS OF THE YEAR :

	M.	F.	Total.
Live Births:—Legitimate.....	1,005	976	1,981
Illegitimate	22	23	45
	<hr/>		
Totals	1,027	999	2,026
	<hr/>		

Birth Rate per 1,000 of the estimated resident population.....18.7

Still Births :—M. 57, F. 49 ; Total : 106.

Rate per 1,000 total (live and still) births.....49.7

Deaths :—M. 705, F. 610 ; Total : 1,315.

Death Rate per 1,000 of the estimated resident population.....12.2

Death Rate per 1,000 adjusted to correspond for age and sex
distribution with England and Wales as a whole 15.0

Percentage of total deaths occurring in public institutions.....38%

Number of women dying from diseases and accidents of pregnancy
and child birth :—

	Deaths	Rate per 1,000 total (live and still) births.
From puerperal sepsis	2	0.94
From other puerperal causes	3	1.41
Totals	<u>5</u>	<u>2.35</u>

Deaths of infants under one year of age :—

	M.	F.	Total.
Legitimate	104	82	186
Illegitimate	1	4	5
Totals	<u>105</u>	<u>86</u>	<u>191</u>

Death Rate of Infants under one year of age :—

All infants per 1,000 live births 94.3

Legitimate infants per 1,000 legitimate live births 93.9

Illegitimate infants per 1,000 illegitimate live births 111.1

Deaths from Measles (all ages)	14
„ Whooping Cough (all ages)	15
„ Diarrhœa (under 2 years of age)	17
„ Tuberculosis	74
Zymotic Death Rate	0.61

Table 2.

COUNTY BOROUGH	Estimated civil population	Birth Rate	Death Rate (adjusted for age and sex)	Infant Mortality	Maternal Mortality	Tuber- culosis Death Rate (all forms) per 100,000 populaton
		per 1,000 population		per 1,000 live births	per 1,000 total (live and still) births	
England and Wales	40,645,000	14.7	11.7	57	3.9	72
121 County Boroughs and Great Towns	20,860,650	14.8	11.8	62	*	*
Barrow-in-Furness	64,500	14.3	14.1	70	6.4	88
Blackburn	118,200	12.0	*	90	4.7	81
Blackpool	120,200	10.4	12.5	45	8.8	59
Bolton	174,900	12.7	14.4	64	6.3	55
Bootle	76,500	21.4	12.4	92	1.2	118
Burnley	93,100	11.6	15.8	66	5.2	81
Bury	59,800	11.9	15.1	66	6.6	68
Liverpool	867,110	20.0	15.2	83	3.3	108
Manchester.....	776,028	14.5	14.7	71	3.6	104
Oldham	133,300	12.7	*	62	6.4	81
Preston	116,200	15.0	14.9	80	4.4	70
Rochdale	94,100	11.6	14.6	85	1.7	67
ST. HELENS	108,100	18.7	15.0	94	2.3	68
Salford	210,000	15.0	15.3	78	4.8	102
Southport	79,300	10.2	12.1	64	4.7	44
Warrington	80,300	16.5	14.1	64	10.6	94
Wigan	84,500	16.9	16.7	97	4.6	76

*Rates not available.

Table 2 shows the main vital statistics of St. Helens in comparison with those of the other County Boroughs in Lancashire as well as with those for England and Wales and the 121 County Boroughs and Great Towns in England and Wales.

From this Table it will be seen that of the 17 County Boroughs in Lancashire, St. Helens has the third highest birth rate, the third lowest maternal mortality rate, and shares, with Bury, the position of having the fourth lowest tuberculosis death rate. St. Helens is, however, second highest in the rate of infant mortality, and excluding Blackburn and Oldham (the adjusted death rates of which are not available), it is the sixth highest of the other 15 County Boroughs in its death rate.

Table 3 gives a summary of the vital statistics for the past 50 years.

It might here be mentioned that as from July, 1935, St. Helens became a self contained registration district and ceased to be part of a larger registration district which included the Borough of Widnes, the Urban Districts of Huyton with Roby, Prescott and Rainford, and the Rural District of Whiston. One effect of this alteration was that the Office of the Superintendent Registrar for St. Helens became centred in St. Helens and not in Whiston as formerly. The change has not affected either the birth rate or the death rate, as births and deaths have always been transferred to the district to which they belong. Marriages, however, are not transferred and the alteration in the situation of the Superintendent Registrar's Office has meant that many marriages of St. Helens people which formerly took place at the District Register Office at Whiston now take place at the Office in St. Helens. This has increased the number of marriages taking place in St. Helens with a consequent increase in the marriage rate, but it does not necessarily mean that more St. Helens people are being married.

POPULATION.—According to the Registrar General's estimate, the mid-1935 population was 108,100. This represents a decrease of 140 from the estimated population of the previous year, which was 108,240.

The natural increase in population during 1935, i.e., the excess of the number of births over deaths, was 711, as compared with a natural increase of 917 in 1934, 436 in 1933 and 933 in 1932.

BIRTHS.—The number of births registered in St. Helens during 1935 was 2,166. 18 births occurring in other districts were transferable to St. Helens and 158 occurring in the borough were transferred to other districts, making a total of 2,026 births belonging to the borough. The birth rate for the year was 18.7 per 1,000 of the population as compared with 19.1 for the previous year. The rate for England and Wales during 1935 was 14.7 and for the 121 County Boroughs and Great Towns was 14.8 per 1,000.

Table 3.

Statistics for St. Helens.

YEAR	Population	Birth Rate	Crude Death Rate	Zymotic Death Rate	Infant Mortality Rate	Rate of Persons Married	DEATHS FROM							
							Small Pox	Measles	Scarlet Fever	Typhoid Fever	Typhus Fever	Diarrhoea	Whooping Cough	Diphtheria
1886	64,311	40.70	22.46	5.2	172	—	0	102	34	28	0	122	41	10
1887	65,718	37.00	21.69	3.9	163	—	0	53	35	34	0	101	28	11
1888	67,158	39.20	19.80	3.1	151	—	0	38	11	22	0	65	61	21
1889	68,628	39.86	23.50	4.18	177	—	0	78	3	81	1	85	15	29
1890	70,132	38.90	25.43	5.3	170	—	0	19	181	24	1	74	68	13
1891	71,509	40.80	26.02	3.0	180	—	0	54	24	26	0	78	29	9
1892	72,399	40.2	21.0	2.64	147	—	1	23	18	25	0	84	31	12
1893	73,576	41.3	24.4	5.4	196	—	5	135	6	52	0	168	19	16
1894	*76,112	37.8	18.3	2.21	161	14.6	0	21	14	26	2	38	61	10
1895	77,288	40.9	21.8	3.10	181	13.0	1	54	9	59	0	101	14	8
1896	78,482	38.7	20.9	3.73	177	13.2	0	38	59	40	0	63	78	17
1897	79,694	40.0	21.8	4.3	181	14.2	0	87	44	33	0	133	33	20
1898	80,926	40.3	19.9	3.2	172	14.2	0	17	24	30	0	140	34	16
1899	82,176	38.3	20.4	2.9	157	13.0	0	21	8	43	0	114	41	15
1900	83,445	37.1	22.8	3.2	188	13.0	0	59	25	19	0	91	56	19
1901	84,734	36.9	19.7	2.56	175	13.9	0	7	29	34	0	95	17	3
1902	86,043	37.4	19.7	2.60	167	11.4	0	59	52	25	0	50	18	20
1903	87,372	39.1	17.5	1.72	138	13.0	0	1	26	18	0	53	30	23
1904	88,722	37.4	20.9	3.96	174	12.9	3	131	17	13	0	120	49	22
1905	89,843	36.1	17.2	1.88	132	11.7	0	41	16	2	0	66	26	18
1906	91,153	33.9	17.3	1.79	159	11.9	0	10	4	18	0	105	5	22
1907	92,476	34.1	18.3	2.87	155	13.6	0	145	10	12	0	36	52	11
1908	93,812	35.2	16.0	1.32	122	12.3	0	0	29	12	0	59	7	17
1909	95,161	32.0	18.5	3.5	149	12.7	0	188	33	13	0	27	62	12
1910	96,523	32.7	14.5	1.26	121	13.1	1	15	22	10	0	51	16	7
1911	96,870	33.5	18.3	3.03	158	12.7	0	69	13	22	0	143	39	8
1912	98,159	32.0	15.5	1.76	124	14.0	0	62	19	8	0	49	46	19
1913	99,460	32.2	18.9	3.74	155	14.6	0	189	26	4	0	120	18	15
1914	100,775	33.3	17.1	1.62	138	14.1	0	25	5	4	0	98	24	8
1915†	92,240	32.1	19.3	3.1	129	16.1	0	126	12	6	0	78	40	32
1916†	90,000	26.5	16.8	1.95	108	14.9	0	2	30	2	0	64	34	85
1917†	90,600	22.0	16.5	2.26	123	10.6	0	65	20	2	0	37	19	79
1918†	90,600	24.1	21.2	2.45	126	11.4	0	26	24	0	0	48	24	100
1919†	100,805	25.5	15.0	0.82	117	17.5	0	5	9	2	0	35	7	25
1920	104,822	31.8	13.5	1.2	113	16.8	0	56	7	0	0	44	7	13
1921	104,900	29.1	12.6	0.83	103	17.2	0	7	5	0	0	63	24	5
1922	106,400	26.4	13.4	0.93	115	11.5	0	60	4	2	0	28	3	5
1923	107,100	24.4	11.9	0.39	91	12.8	0	0	4	1	0	24	10	8
1924	108,700	24.1	12.0	0.68	103	12.7	0	29	1	2	4	36	11	4
1925	109,600	23.9	12.0	0.85	100	12.0	0	17	7	3	0	35	33	6
1926	110,000	23.2	12.0	0.62	102	10.2	0	27	1	0	0	43	4	6
1927	113,100	20.8	11.4	0.82	88	11.5	0	60	2	0	0	26	5	7
1928	110,500	21.8	12.0	0.67	98	11.8	0	15	5	1	0	29	21	10
1929	109,200	20.7	14.6	0.91	114	13.0	0	49	6	1	0	23	13	11
1930	109,200	21.5	11.4	0.28	80	13.6	0	7	2	0	0	4	8	4
1931	108,300	20.1	12.5	0.48	88	13.6	0	30	0	0	0	21	0	7
1932	107,600	20.1	11.4	0.22	89	13.9	0	1	1	0	0	26	4	0
1933	107,600	18.0	14.0	0.83	116	13.4	0	12	2	3	0	18	52	8
1934	*108,240	19.1	10.6	0.38	65	13.6	0	10	2	1	0	19	1	18
1935	108,100	18.7	12.2	0.61	94	15.8	0	14	2	1	0	21	15	17

† Estimated civil population.

* Borough extended.

The following table shows the birth rate and the marriage rate for St. Helens for 1935 in comparison with the rates for quinquennial periods since 1896.

Period.	Birth Rate. per 1,000 of the population.	Marriage Rate.
1896-1900	37.0	13.5
1901-1905	33.5	12.7
1906-1910	37.3	13.5
1911-1915	32.5	14.3
1916-1920	25.9	14.2
1921-1925	25.5	13.2
1926-1930	21.6	12.0
1931	20.1	13.6
1932	20.1	13.9
1933	18.0	13.4
1934	19.1	13.6
1935	18.7	15.8

In 1935 the male births numbered 1,027 and the females 999, being a proportion of 1,028 male to 1,000 female children born.

Illegitimate births were 2.2% of the total, as compared with 2.3% in the previous year. Table 4 gives the illegitimate birth rates since 1915.

Table 7 shows the birth rate for St. Helens since 1880 and the figures for England and Wales for the same period.

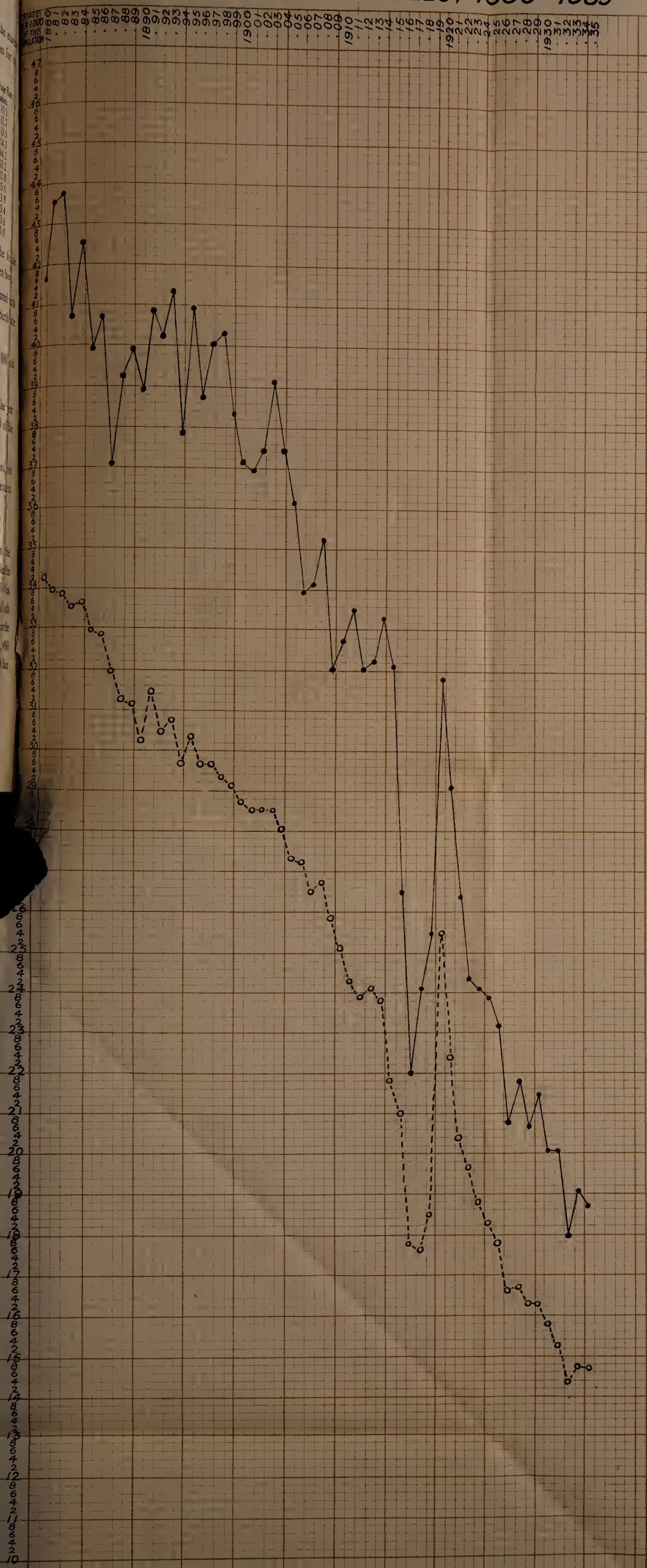
MARRIAGES.—The number of marriages during the year was 852, giving a rate of persons married of 15.8 per 1,000 of the population.

This rate is much higher than it has been for many years, but as mentioned on page 14 is almost certainly due to the Superintendent Registrar's Office now being within the borough.

Table 5 shows the rate for past years.

DEATHS.—The number of deaths occurring within the borough during the year was 1,275. This total includes 163 deaths in St. Helens of persons usually resident in other areas, but excludes 203 deaths of persons usually resident within the borough which occurred in other areas, so that the actual number of deaths assignable to St. Helens is 1,315. This gives a crude death rate of 12.2 per 1,000 of the resident population, compared with a rate of 10.6 per 1,000 for 1934.

TABLE 7.
 BIRTH RATE -
 ST. HELENS and ENGLAND and WALES, 1880-1935



St. Helens —●—

England and Wales ○-----

Table 4.
Number of illegitimate births.

Years	...	...	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Number of illegitimate births			92	78	78	112	127	131	136	81	76	70	79	68	80	62	58	72	59	44	44	47	45
Proportion per 1,000 population		...	0.90	0.79	0.79	1.1	1.2	1.2	1.3	0.7	0.7	0.64	0.72	0.61	0.7	0.56	0.53	0.66	0.54	0.41	0.41	0.44	0.42

Table 5.
Number of marriages.

Years	...	...	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Number of Marriages			745	568	536	579	924	882	903	612	686	692	661	565	653	653	710	740	738	750	723	733	852
Marriage rate per 1,000 population		...	14.5	11.58	10.60	11.4	17.5	16.8	17.2	11.5	12.8	12.7	12.0	10.2	11.5	11.8	13.0	13.6	13.6	13.9	13.4	13.6	15.8

The adjusted death rate for 1935 (i.e. the crude death rate 'adjusted' to a figure which represents the rate of mortality that would have occurred if the age and sex distribution in St. Helens had been the same as that of England and Wales as a whole), was 15.0 per 1,000 as compared with 13.0 per 1,000 in 1934. The death rate for England and Wales as a whole for 1935 was 11.7 per 1,000.

Though yearly variations in age and sex distribution also occur locally, these are never very great, so that the crude death rate can be used for yearly local comparisons and the trend of the death rate in St. Helens since 1881 is seen in the following statement :—

Crude Death Rate per 1,000 of the population.

Period.	
1881-85	23.2
1886-90	22.5
1891-95	21.8
1896-1900	20.3
1901-05	19.0
1906-10	16.9
1911-15	17.8
1916-20	16.6
1921-25	12.3
1926-30	12.3
1931	12.5
1932	11.4
1933	14.0
1934	10.6
1935	12.2

Seasonal Deaths.—The following statement gives the number of St. Helens deaths in each quarter of the year, with the death rate for each quarter, and the death rate for England and Wales for the same periods.

	No. of Deaths.	Death rate per 1,000 of population.		
		St. Helens (Crude)	St. Helens (Adjusted)	England & Wales
First Quarter	398	14.7	18.1	13.2
Second Quarter	322	11.9	14.6	12.0
Third Quarter	243	9.0	11.1	9.8
Fourth Quarter	352	13.0	16.0	12.0

Coroner's Inquests.—During the year, 115 deaths were reported to the Coroner. In 53 of these the Coroner was able without an inquest to issue a certificate attributing the death to natural causes. In 63 instances (including 1 adjourned from 1934) where inquests were held, the deaths were recorded as attributable to :—

Colliery accidents	.....	.....	.....	.....	.....	.....	7
Street accidents	.....	.....	.....	.....	.....	.....	11
Accidents in works	.....	.....	.....	.....	.....	.....	4
Drowning	.....	.....	.....	.....	.....	.....	6
Poisoning	.....	.....	.....	.....	.....	.....	4
Scalds and burns	.....	.....	.....	.....	.....	.....	8
Other deaths from violence	.....	.....	.....	.....	.....	.....	13
Natural causes	.....	.....	.....	.....	.....	.....	3
Other causes	.....	.....	.....	.....	.....	.....	7
							<hr/> 63 <hr/>

Causes of Death.—Figures relating to the causes of and ages at death during the year are given in Table 9.

Zymotic Death Rate.—The number of deaths caused by the “ seven principal epidemic diseases ” during 1935 was 66, giving a zymotic death rate of 0.61 per 1,000 of the population as compared with 0.38 during 1934.

The causes of these deaths during 1935 were as follows :—

Diarrhœa and enteritis (under 2 years)	.....	.....	17
Whooping Cough	.....	.....	15
Measles	.....	.....	14
Scarlet Fever	.....	.....	2
Diphtheria (including membranous croup)	.....	.....	17
Fever (enteric, typhus, and simple continued fever)	.....	.....	1
Smallpox	.....	.....	0

Table 3 shows the figures during the past 50 years.

Table 9.
Causes of, and age at, death during 1935.

Causes of Death	Sex	All Ages	At Ages									
			0-1	1—	2—	5—	15—	25—	35—	45—	55—	65—
All Causes	M F	705 610	105 86	26 15	20 14	24 21	19 27	27 24	52 46	84 53	104 77	153 141
Typhoid and paratyphoid fevers	M F	— 1	— —	— —	— —	— —	— —	— —	— —	— —	— 1	— —
Measles	M F	7 7	1 2	4 1	2 2	— 1	— —	— —	— —	— 1	— —	— —
Scarlet fever	M F	2 —	— —	2 —	— —	— —	— —	— —	— —	— —	— —	— —
Whooping cough	M F	5 10	4 5	1 3	— 2	— —	— —	— —	— —	— —	— —	— —
Diphtheria	M F	13 4	— —	— —	3 2	9 2	— —	— —	1 —	— —	— —	— —
Influenza	M F	20 19	2 2	— —	— 1	1 2	— 1	2 1	5 2	6 1	2 3	— —
Encephalitis lethargica	M F	— 2	— —	— —	— —	— —	— 1	— 1	— —	— —	— —	— —
Cerebro-spinal fever	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Tuberculosis of respiratory system	M F	34 31	— —	— —	— —	— 3	4 11	8 5	11 7	6 4	4 1	— —
Other tuberculous diseases	M F	3 6	1 1	— 1	1 2	— —	— —	1 —	— 1	— 1	— —	— —
Syphilis	M F	2 —	1 —	— —	— —	— —	— —	— —	— —	1 —	— —	— —
General paralysis of the insane, tabes dorsalis	M F	4 1	— —	— —	— —	— —	— —	— —	1 —	2 1	1 —	— —
Cancer, Malignant disease	M F	58 63	— —	— —	— —	— —	1 1	— 1	3 8	8 13	17 15	24 20
Diabetes	M F	6 6	— —	— —	— —	— —	— —	— —	— —	1 —	1 2	— —
Cerebral haemorrhage, etc.	M F	35 37	— —	— —	— —	— —	— —	— —	2 2	4 1	9 7	12 15
Heart Disease	M F	129 122	— —	— —	1 —	2 3	1 5	1 6	6 5	20 12	24 18	53 48
Aneurysm	M F	2 —	— —	— —	— —	— —	— —	— —	— —	— —	2 —	— —
Other circulatory diseases	M F	35 18	— —	— —	— —	— —	— —	— —	— —	2 4	4 1	18 11
Bronchitis	M F	35 31	7 4	1 —	— —	— —	— 1	— —	1 —	5 2	3 3	12 11
Pneumonia (all forms)	M F	52 49	14 16	7 5	5 3	2 5	— —	2 1	5 5	9 2	4 3	3 5
Other respiratory diseases	M F	9 5	— —	— —	1 —	— —	2 1	— —	2 1	1 —	1 2	2 —
Peptic ulcer	M F	8 —	— —	— —	— —	— —	— —	2 —	1 —	2 —	3 —	— —
Diarrhœa, etc.	M F	14 7	9 6	2 —	1 —	— —	— 1	— —	— —	— —	— —	1 —
Appendicitis	M F	3 1	— —	— —	— —	1 —	— —	— —	1 —	— —	1 1	— —
Cirrhosis of liver	M F	2 2	— —	— —	— —	— —	— —	— —	— —	— —	2 —	— —
Other diseases of liver, etc.	M F	— 4	— —	— —	— —	— —	— —	— —	— 1	— —	— 1	— 2
Other digestive diseases	M F	14 15	6 3	— 1	— —	2 —	— —	— —	— —	1 5	2 5	1 —

Table 9—continued.

Causes of Death	Sex	All	At Ages										
		Ages	0-1	1-	2-	5-	15-	25-	35-	45-	55-	65-	75-
Acute and chronic nephritis	M	23	—	—	1	—	3	2	—	5	3	5	4
	F	13	—	—	—	—	—	1	3	—	3	3	3
Puerperal Sepsis	F	2	—	—	—	—	—	2	—	—	—	—	—
Other puerperal causes	F	3	—	—	—	—	—	3	—	—	—	—	—
Congenital debility, premature birth, malformations, etc.	M	57	55	1	1	—	—	—	—	—	—	—	—
	F	42	40	—	—	—	1	—	1	—	—	—	—
Idiocy	M	24	—	—	—	—	—	—	—	—	—	7	17
	F	38	—	—	—	—	—	—	—	—	2	7	29
Suicide.....	M	7	—	—	—	—	—	1	1	—	3	2	—
	F	2	—	—	—	—	—	2	—	—	—	—	—
Death by violence	M	38	—	4	2	3	7	4	4	5	5	3	1
	F	15	—	1	1	3	—	—	1	1	1	3	4
Other defined diseases	M	60	5	4	2	4	1	4	8	6	13	9	4
	F	53	7	3	1	2	4	1	9	5	6	10	5
Cases ill-defined or unknown	M	4	—	—	—	—	—	—	—	—	2	—	2
	F	1	—	—	—	—	—	—	—	—	—	1	—
Totals		1315	191	41	34	45	46	51	98	137	181	303	188

Deaths from Tuberculosis.—Tuberculosis was the cause of 74 deaths during the year—that is 5.63% of all deaths belonging to the borough. Of these deaths, 65 were attributable to tuberculosis of the lungs and 9 to other forms of tuberculosis. The ages at which these deaths occurred are shown in Table 9.

Malignant Diseases.—The deaths from these diseases during the past five years were as follows :—

AGE				1931	1932	1933	1934	1935
Under 1 year				—	—	—	—	—
1—2 years				—	—	—	—	—
2—5				—	—	—	—	—
5—15				—	—	—	2	—
15—25				—	—	—	—	2
25—35				1	5	2	5	1
35—45				8	6	12	4	11
45—55				29	19	30	16	21
55—65				32	45	29	40	32
65—75				44	41	43	37	44
75 and over				7	12	15	17	10
Totals				121	128	131	121	121
Percentage of the total deaths				8.94	10.43	8.72	10.54	9.20
Death rate per 1,000 of population				1.12	1.19	1.22	1.12	1.12
Death rate per 1,000 of population, England and Wales				1.48	1.51	1.53	1.56	1.59

There would appear to be no relationship between the incidence of malignant diseases and industrial processes in St. Helens.

Other causes of death.—The following extract from Table 9 shows some of the other principal causes of death :—

	Number	Percentage of Total Deaths.
Pneumonia (all forms)	101	7.68
Bronchitis and other Respiratory Diseases	80	6.08
Influenza	39	2.96
Heart Disease	251	19.09
Cerebral Haemorrhage, etc.	72	5.48
Suicide and other deaths from violence	62	4.71

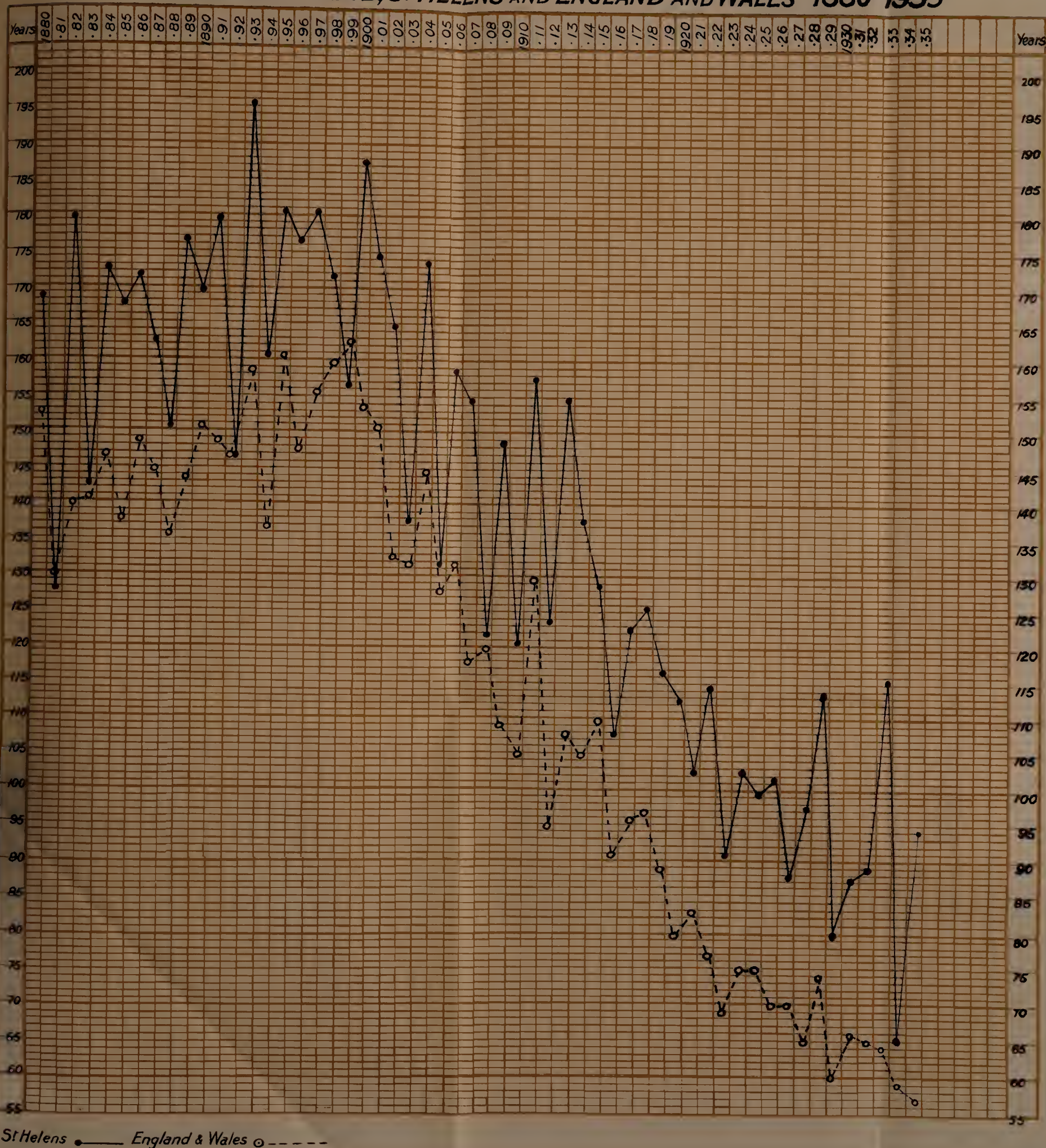
Infant Mortality.—During 1935 there were 191 deaths of children under one year of age. This corresponds to an infant mortality rate of 94.3 per 1,000 births. The infant death rate for 1934 was 65.4.

Further reference to this subject is made in the Maternity and Child Welfare Section.

Table 10 shows the infant death rate for St. Helens since 1880, and the figures for England and Wales for the same period.

Table 10.

INFANT MORTALITY RATE, ST HELENS AND ENGLAND AND WALES - 1880-1935



Wheat, 1972, and Anderson and Tharion

III.—INFECTIOUS DISEASES.

The following are the infectious diseases compulsorily notifiable to the Medical Officer of Health in St. Helens :—

Smallpox	Puerperal Fever
Scarlet Fever	Puerperal Pyrexia
Diphtheria and Membranous	Cerebro Spinal Fever
Croup	Acute Poliomyelitis
Enteric Fever	Acute Polio Encephalitis
Typhus Fever	Acute Encephalitis Lethargica
Relapsing Fever	Ophthalmia Neonatorum
Continued Fever	Erysipelas
Dysentery	Malaria
*Pneumonia	†Measles and German Measles
Cholera	†Whooping Cough
Plague	Tuberculosis (all forms)

**Acute Primary Pneumonia and Acute Influenzal Pneumonia.*

†Notification by medical practitioner is not required if the disease "has occurred in the same family or institution and been notified within the period of two months immediately preceding the date on which he first becomes aware of a further case."

Table 11 shows the total number of cases notified during the year, the total number of deaths which occurred, and the numbers admitted to the Corporation Hospitals.

Table 12 gives the age distribution of the cases notified, and Table 9 the age distribution of the deaths which occurred. The number of cases notified during each week of the year is shown in Table 13, and the number of notifications each year during the past 10 years is seen in Table 14.

Table 13.

Infectious Diseases.—Number of cases of Infectious Diseases notified each week in 1935.

Week ending	Smallpox	Scarlet Fever	Diphtheria	Measles	Whooping Cough	Enteric Fever	Dysentery	Erysipelas	Pneumonia	Typhus Fever	Puerperal Fever	Puerperal Pyrexia	Ophthalmia Neonatorum	Poliomyelitis	Encephalitis Lethargica	Cerebro Spinal Fever
n. 5	—	4	8	1	25	—	—	1	8	—	—	—	—	—	—	—
12	—	11	6	7	33	—	—	2	3	—	—	1	—	—	—	—
19	—	9	11	4	50	—	—	1	8	—	—	—	1	—	—	—
26	—	5	8	1	37	—	—	—	10	—	1	—	—	—	—	—
eb. 2	—	5	6	—	35	—	—	—	12	—	—	—	—	—	—	—
9	—	8	5	4	37	—	—	1	7	—	—	1	—	—	—	—
16	—	6	2	1	45	—	—	—	9	—	—	—	1	—	—	—
23	—	7	9	6	27	—	—	3	8	—	1	—	—	—	—	—
ar. 2	—	10	3	3	34	—	—	2	1	—	—	—	—	—	—	—
9	—	7	3	16	43	—	—	1	6	—	—	—	—	—	—	—
16	—	6	—	7	51	—	—	—	10	—	—	1	—	—	—	—
23	—	8	5	13	35	—	—	1	12	—	—	2	—	—	—	—
30	—	3	3	13	70	—	—	—	13	—	—	2	—	—	—	—
pl. 6	—	4	2	12	35	—	—	1	6	—	—	—	—	—	—	—
13	—	7	3	12	57	—	—	—	9	—	—	—	—	—	—	—
20	—	2	4	14	33	—	—	3	7	—	1	1	—	—	—	—
27	—	8	2	7	24	—	—	1	2	—	—	—	—	—	—	—
ay 4	—	8	1	16	53	—	—	1	3	—	—	1	—	—	—	—
11	—	3	6	5	30	—	—	1	5	—	—	—	—	—	—	—
18	—	9	3	7	26	—	—	1	2	—	—	—	—	—	—	—
25	—	13	1	16	31	—	—	—	4	—	—	1	—	—	—	—
ne 1	—	7	2	7	24	—	—	—	8	—	—	—	—	—	—	—
8	—	11	4	34	11	—	—	—	5	—	—	—	—	—	—	1
15	—	5	4	22	16	—	—	1	8	—	—	—	2	—	—	—
22	—	12	5	34	22	—	—	2	10	—	—	1	1	1	—	—
29	—	4	5	18	22	—	—	2	3	—	—	—	2	—	—	—
ly 6	—	7	—	22	20	—	—	1	—	—	—	—	—	—	—	—
13	—	4	3	19	17	—	—	1	4	—	—	—	—	—	—	—
20	—	7	1	34	8	—	—	—	8	—	—	—	1	—	—	—
27	—	8	2	30	10	—	—	—	3	—	—	—	1	—	—	—
ag. 3	—	9	7	34	4	—	—	—	4	—	1	—	1	—	—	—
10	—	6	9	23	—	—	—	1	3	—	1	—	—	—	—	—
17	—	9	2	26	7	—	—	—	3	—	—	—	—	—	—	—
24	—	8	5	21	1	—	—	—	2	—	1	—	—	—	—	—
31	—	8	7	12	3	—	—	3	3	—	—	1	—	—	—	—
pt. 7	—	9	4	29	3	—	—	1	1	—	—	—	—	—	—	—
14	—	14	4	27	1	—	—	—	—	—	—	—	—	—	1	—
21	—	17	10	40	3	—	—	2	—	—	—	—	—	—	—	—
28	—	18	4	31	3	—	—	2	3	—	—	—	—	—	—	—
ct. 5	—	19	3	57	1	—	—	2	1	—	1	—	—	—	—	—
12	—	13	3	55	1	—	—	1	8	—	—	—	—	—	—	—
19	—	15	3	90	3	1	—	—	4	—	—	—	—	—	—	—
26	—	15	1	40	2	—	—	3	3	—	—	—	—	—	—	—
ov. 2	—	22	4	71	3	—	—	5	3	—	—	—	—	—	—	—
9	—	28	5	30	4	—	—	2	6	—	—	—	1	—	—	—
16	—	18	4	50	—	—	—	3	10	—	1	—	—	—	—	—
23	—	18	2	44	7	1	—	2	6	—	—	—	—	—	1	—
30	—	15	4	63	5	—	—	2	18	—	1	1	1	—	—	—
ec. 7	—	24	10	51	9	—	—	4	6	—	—	1	2	—	—	—
14	—	14	3	83	1	—	—	5	3	—	—	—	—	—	—	—
21	—	19	7	77	2	—	—	2	8	—	—	—	—	—	—	—
28	—	17	7	74	8	—	—	2	6	—	—	—	—	—	—	—
total	—	543	225	1416	1032	2	—	70	295	—	9	14	14	1	2	1

Table 14.

Notification of Infectious Diseases received during the undermentioned years.

	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Smallpox	—	—	2	—	—	—	—	—	—	—
Scarlet Fever	153	206	1111	506	255	148	147	281	286	543
Diphtheria	103	131	153	170	162	121	86	203	231	225
Measles	1625	2892	1465	1995	1026	2332	512	4092	1177	1416
Whooping Cough	304	448	649	685	516	43	394	1580	185	1032
Enteric Fever	1	1	1	2	3	1	—	11	2	2
Dysentery	6	1	13	1	2	—	15	1	1	—
Erysipelas	42	70	80	77	72	52	58	80	77	70
Pneumonia	256	209	263	491	251	226	308	469	234	295
Typhus Fever	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	7	6	11	16	17	7	6	2	10	9
†Puerperal Pyrexia	10	23	20	25	13	8	8	12	19	14
Ophthalmia										
Neonatorum	23	23	20	24	14	3	7	6	7	14
Poliomyelitis.....	—	—	—	9	—	—	—	12	—	1
Encephalitis										
Lethargica	3	2	3	1	2	1	1	1	1	2
Cerebro Spinal Fever	2	—	—	1	—	—	17	10	—	1
Malaria	—	1	—	—	—	—	—	—	—	—

† Notifiable since 1st October, 1926.

GENERAL OBSERVATIONS.—Judged by the prevalence of infectious diseases, the year 1935 was not a healthy year. A severe epidemic of whooping cough during the early months was followed by an epidemic of scarlet fever commencing in the latter part of the year. Cases of measles were also very prevalent throughout practically the whole of the year, rising to epidemic proportions during the last month. As regards diphtheria, though there was no increase in the number of cases as compared with the previous year, this number still remained at a much higher level than has been usual for many years.

SMALLPOX.—No case of smallpox was notified during the year.

The extent of vaccination in St. Helens since 1901 is shown in Table 15.

During the year the part-time Vaccination Officer retired on superannuation and the opportunity was taken to appoint one of the clerks in the Medical Officer's Department as Vaccination Officer in order to bring this work into closer relation with other health activities.

Table 15.

Vaccination returns since 1901.

YEAR	2 Vaccinated	3 Insus- ceptible	4 Dead	5 Con- scientious Objector	6 Post- poned	7 Re- moved	8 Unaccounted	Percentage not Vaccinated including Columns 5, 6, 7, 8
1901	2,639	4	391	11	29	59	24	4.4
1902	2,788	4	342	7	12	58	34	3.8
1903	2,977	8	325	2	6	62	11	2.6
1904	2,940	7	341	10	10	42	25	2.8
1905	2,923	3	270	6	10	29	18	2.1
1906	2,733	5	318	8	12	39	22	2.8
1907	2,810	9	257	24	19	49	17	3.7
1908	2,858	18	248	70	11	35	20	4.5
1909	2,720	8	241	81	9	33	11	4.7
1910	2,731	3	255	131	3	23	19	6.0
1911	2,750	9	277	148	5	26	14	6.5
1912	2,646	4	294	216	12	23	4	8.7
1913	2,499	6	296	339	14	27	9	13.0
1914	2,654	11	281	348	6	22	24	13.0
1915	2,352	2	189	367	9	34	15	15.3
1916	2,056	4	186	287	3	39	24	14.6
1917	1,702	4	158	267	1	6	45	15.7
1918	1,861	0	201	281	8	40	19	14.5
1919	1,999	2	189	385	4	25	18	17.8
1920	2,452	1	223	553	12	18	23	19.8
1921	2,234	2	179	530	6	29	17	20.6
1922	2,143	7	185	411	5	27	23	17.8
1923	2,144	10	139	261	4	10	22	12.17
1924	2,227	7	156	157	6	12	25	8.24
1925	2,150	2	147	234	8	10	26	11.45
1926	2,084	8	151	237	14	9	14	11.62
1927	1,984	7	145	196	10	20	11	10.67
1928	1,990	5	149	242	8	20	8	12.26
1929	1,782	8	139	288	7	16	11	15.3
1930	1,852	3	122	317	8	11	19	16.09
1931	1,724	9	116	329	8	11	15	17.39
1932	1,712	4	125	352	5	15	12	18.32
1933	1,520	5	118	313	8	20	14	18.93
1934	1,663	2	92	355	5	13	23	19.33†

† Of the 19.33 per cent. unvaccinated, 17.24 per cent. are conscientious objectors.

SCARLET FEVER.—During 1935, 543 cases were notified and 2 deaths occurred. During the first nine months of the year the incidence of the disease, although widespread, was not specially marked, but in the last three months of the year the disease assumed an epidemic form.

The following statement shows the age distribution of all cases occurring and of the deaths :—

Age	No. of Cases.	No. of Deaths.	Case Mortality.
Under 5 years	165	2	1.2%
5—15 years	333	—	—
Over 15 years	45	—	—

The type of disease occurring was, generally speaking, mild, and in the main free from complications. The use of anti-scarlatinal serum was extended to all types of cases entering the hospital except those of a very mild nature.

Cases are normally discharged from hospital at the end of 28 days, but during 1935 the average duration of stay was 32 days. Two cases developed mastoiditis and were successfully operated on.

DIPHTHERIA.—During 1935 there was, unfortunately, no marked reduction in the increased incidence and virulence of diphtheria which has been apparent during the past three years. 225 cases were notified during 1935 with 17 deaths as compared with 231 cases notified and 19 deaths during 1934.

The following statement shows the age distribution of the cases occurring and of the deaths :—

Age.	No. of cases.	No. of Deaths.	Case mortality.
Under 5 years	53	5	9.4%
5—15 years	133	11	8.3%
15—45 years	38	1	2.6%
Over 45 years	1	—	—

This persistent increased incidence and virulence has been a matter of much concern. A study of the figures given shows the well-known characteristic of this disease, namely, its greater incidence and

fatality amongst children under 15 years of age. To combat this, an immunisation clinic was established where parents can have their children protected against the disease free of charge, and the protective material is issued free of charge to medical practitioners for use in their private practices. Propaganda work in favour of immunisation was carried out during the year at the schools, at maternity and child welfare centres, and by the health visitors on the districts. Despite these efforts, however, the response has been disappointing and the number of children in St. Helens protected against the disease in the susceptible period of their lives is still far too small. The following figures show the work carried out at the immunisation clinic from its inception on 26th February, 1935, to the end of the year :—

No. of children tested as to susceptibility	111
No. of children immunised	270
No. of children who failed to complete the immunisation treatment	52
Total attendances at the Clinic	952

These figures do not include cases immunised by private practitioners, but it is believed that the number is relatively very small.

For the treatment of diphtheria, antitoxin is available without charge for medical practitioners either at the office of the Medical Officer of Health or at the Borough Isolation Hospital. It is pleasing to note that during the past year greater use has been made of this service.

ENTERIC FEVER.—Two cases were notified in St. Helens during the year and one death was registered as attributable to this disease. This death, however, occurred in a Liverpool Hospital, the notification being transferred to St. Helens for registration purposes.

Of the two cases occurring locally the primary case occurred in one of the general hospitals. It was discovered that the disease was not contracted in St. Helens, but at a seaside resort where the individual had been in employment. The second case occurred in a

nurse who contracted the disease whilst in attendance on the first case. Both were transferred to the Isolation Hospital and made complete recoveries. Special following-up enquiries were made into all hospital patients and members of the staff who had been in contact with the two cases, but no further case occurred amongst these.

***MEASLES.**—While generally prevalent throughout the year, the incidence of measles increased during the latter part of the year and assumed epidemic form towards the end of the year. In all, 1,416 cases were notified and 14 deaths were registered as attributable to this disease. The following statement shows the age distribution of the cases and the deaths :—

Age.	No. of cases.	No. of deaths.	Case mortality.
Under 5 years	992	12	1.2%
5—15 years	424	1	0.2%
Over 15 years	—	1	—

The one adult death shown in the table was that of a St. Helens person who died in another district, the registration being transferred to St. Helens for statistical purposes.

During the year the facilities offered by the Corporation for the nursing of cases were made use of more fully. 25 cases were treated at the Isolation Hospital, and the District Nurses paid 799 visits to 41 cases for home nursing.

***WHOOPING COUGH.**—The number of cases of Whooping Cough notified during 1935 was the second highest since 1916. During the year 1,032 cases were notified, with 15 deaths. The epidemic commenced in the Winter of 1934 and continued in a severe form during the first seven months of 1935. The advent of the warmer weather brought the epidemic to a close, and the number of cases notified in the following five months was comparatively small.

* Note.—Further details regarding these diseases will be found in that section of the Report dealing with Maternity and Child Welfare, page 52.

The age distribution of the cases and deaths during 1935* was as follows :—

Age.	No. of cases.	No. of deaths.	Case mortality.
Under 5 years	720	15	2.1%
5—15 years	308	—	—
Over 15 years	4	—	—

***PUERPERAL FEVER AND PUERPERAL PYREXIA.**

9 cases of Puerperal Fever and 14 cases of Puerperal Pyrexia were notified during the year, and 2 deaths were reported as due to Puerperal Sepsis.

***OPHTHALMIA NEONATORUM.**—14 cases were notified during the year, and all recovered.

CEREBRO-SPINAL MENINGITIS AND ACUTE POLIOMYELITIS.—One case of Cerebro-Spinal Meningitis and one case of Acute Poliomyelitis were notified during the year. Both proved fatal.

ENCEPHALITIS LETHARGICA.—Two cases were notified during the year. One of the cases was of the acute fulminating type and proved fatal. The other case also died during the year.

ERYSIPELAS.—During 1935, 70 cases of Erysipelas were notified, and 5 deaths were attributed to this disease.

DYSENTERY—MALARIA.—No cases were notified during the year.

NON-NOTIFIABLE INFECTIOUS DISEASES.—The number of cases of Mumps coming to the notice of the Health Department showed a marked decrease, there being only 60 cases in 1935 as compared with 567 in 1934. Practically one half of these cases occurred in the first three months of the year. The number of cases of Chicken-pox was also less than in the previous year (312 for 1935 as compared with 487 for 1934).

* Note.—Further details regarding this disease will be found in that section of the Report dealing with Maternity and Child Welfare, page 52.

Though the number of deaths registered as occurring from Influenza increased from 21 during 1934 to 39 during 1935, there was no marked incidence of this disease.

The number of deaths from Diarrhoea &c. in children under 2 years of age was 17.

BOROUGH ISOLATION HOSPITAL.—Arrangements at this hospital, which has 94 beds, remained as in previous years. Owing to the greatly increased incidence of infectious diseases throughout the year, there was a large increase in the number of cases dealt with, and towards the end of the year the accommodation was taxed to the fullest. The great variety of cases occurring also emphasised the need for more small ward accommodation, and it is, therefore, a matter of satisfaction that work has now commenced on the new cubicle isolation block. This, when completed, will provide 6 single bed cubicles and 2 double bed cubicles, and will greatly facilitate the isolation of the very varied types of infectious diseases which have now to be admitted.

The next improvement to be carried out at this hospital should be the extension and modernisation of the administrative block. Additional accommodation is urgently required for the staff, some of whom still have to sleep in a wooden hut put up as a temporary addition nearly 20 years ago. The kitchen also is far too small for the work which has to be done, and a proper heating and hot water installation, together with more bath and lavatory accommodation, should be installed. It is hoped that the Committee will be able to take these improvements in hand at an early date.

At the beginning of the year there were 61 patients in hospital. New cases admitted during the year numbered 957, making a total number of 1,018 patients dealt with. At the end of the year there were 109 patients remaining. The highest number of patients under treatment at any one time was 126, and the lowest 38.

The details of admissions and discharges are shown in Table 16.

Table 16.

Peasley Cross Isolation Hospital.

Hospital Diagnoses of cases treated during 1935.

DISEASE	In hospital Jan. 1st, 1935	Admitted	Discharged	Died	In hospital Jan. 1st, 1936
Scarlet Fever	24	584	531	3	74
Diphtheria	29	182	170	18	23
Puerperal Fever	—	2	1	—	1
Puerperal Pyrexia	—	13	12	—	1
Venereal Disease	—	1	1	—	—
Measles	—	25	17	3	5
Other Diseases	8	145	132	16	5
Mothers with sick babies	—	—	—	—	—
Babies with sick mothers	—	5	5	—	—
Total	61	957	869	40	109

Of the 533 cases of scarlet fever admitted, 25 (4.69 %) were return cases.

AMBULANCE PROVISION.—Two motor ambulances are kept at the Isolation Hospital to convey patients to any of the Corporation Hospitals, and a Morris Van for the conveyance of bedding, etc. During the year the total distance travelled was 17,323 miles.

Though urgent cases are at all times conveyed to the hospital without delay, there is no regular night ambulance service.

DISINFECTION.—Disinfection of premises by means of formalin sprays is carried out by the disinfectors from the Medical Officer's Department, and bedding and articles of clothing, etc. are disinfected by steam or other appropriate method at the Borough Isolation Hospital. During the year the disinfectors dealt with 2,620 premises, and the numbers of articles disinfected at the Isolation Hospital were as follows :—

	Articles.
Blankets, Sheets and Rugs	10,104
Hospital Clothing and Bedding	8,076
Pillows and Cushions	6,928
Mattresses, etc.	2,802
Other Articles of Clothing	9,206
Library Books	279
Other Articles	7,120

There is no municipal cleansing station, but facilities for the cleansing and disinfection of persons and their belongings are afforded at the Borough Isolation Hospital. The steam disinfecter is used for the disinfestation of bedding, etc. of families re-housed from slum property. School children are also removed to this Institution for compulsory cleansing when required.

IV.—LABORATORY WORK.

The majority of the routine bacteriological and pathological examinations are carried out by the medical staff at the Borough Laboratory at the Town Hall, but bloods for the Wasserman reaction and specimens of an unusual nature are examined at the City Laboratories, Liverpool. Table 17 shows the numbers of specimens dealt with during 1935.

Table 17.

SPECIMENS.	Number Received	Results	
		Positive	Negative
Swabs for Diphtheria	3503	163	3340
Sputa for Tuberculosis	904	301	603
Hairs for Ringworm	13	4	9
Blood for Wasserman Reaction	245	55	190
Films for Gonococci	265	76	189
Pus and other fluids and discharges for various organisms	91	13	78
Total	5021	612	4409

Outfits for the collection of specimens of sputa, blood specimens, throat swabs, etc., are supplied free of charge.

Specimens requiring chemical analysis are dealt with by the Public Analyst at his laboratories, and during the past year 241 informal samples of milk were subjected to the Gerber Test at the Borough Laboratory. In 34 of these samples the test indicated deficiencies.

V.—TUBERCULOSIS.

INCIDENCE.—During 1935, formal notifications under the Regulations were received in respect of 83 cases of pulmonary and 31 cases of non-pulmonary tuberculosis.

A further 18 new cases came to the knowledge of the department from the following sources :—

	Pulmonary	Non- Pulmonary
Death Returns of cases not previously notified	1	1
Posthumous notifications	3	3
Transfers from other areas	6	4
	—	—
	10	8
	—	—

Investigation of the reasons for failure to notify, or of posthumous notification, revealed that difficulty in diagnosis was the cause in 6 of the cases and in the other 2 cases the medical practitioner had been called in only a few days prior to death.

The total number of new cases for the year was, therefore, 132, of which 93 were pulmonary and 39 non-pulmonary. At the end of 1935 there remained on the Tuberculosis Register 485 cases of pulmonary and 317 cases of non-pulmonary tuberculosis. The age grouping of the new cases and of the deaths that occurred during the year is shown in Table 18.

Table 18.
Particulars of new cases and of deaths during 1935.

Ages	New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	Males	Females	Males	Females	Males	Females	Males	Females
Under 1 year	—	—	3	1	—	—	1	1
1 to 5 years	—	2	2	6	—	—	1	3
5 to 10 years	1	—	4	2	—	1	—	—
10 to 15 years	—	4	6	4	—	2	—	—
15 to 20 years	3	7	2	—	1	4	—	—
20 to 25 years	4	10	3	2	3	7	—	—
25 to 35 years	11	8	—	1	8	5	1	—
35 to 45 years	9	8	—	1	11	7	—	1
45 to 55 years	9	5	—	2	6	4	—	1
55 to 65 years	6	2	—	—	4	1	—	—
65 —	3	1	—	—	1	—	—	—
Totals	46	47	20	19	34	31	3	6

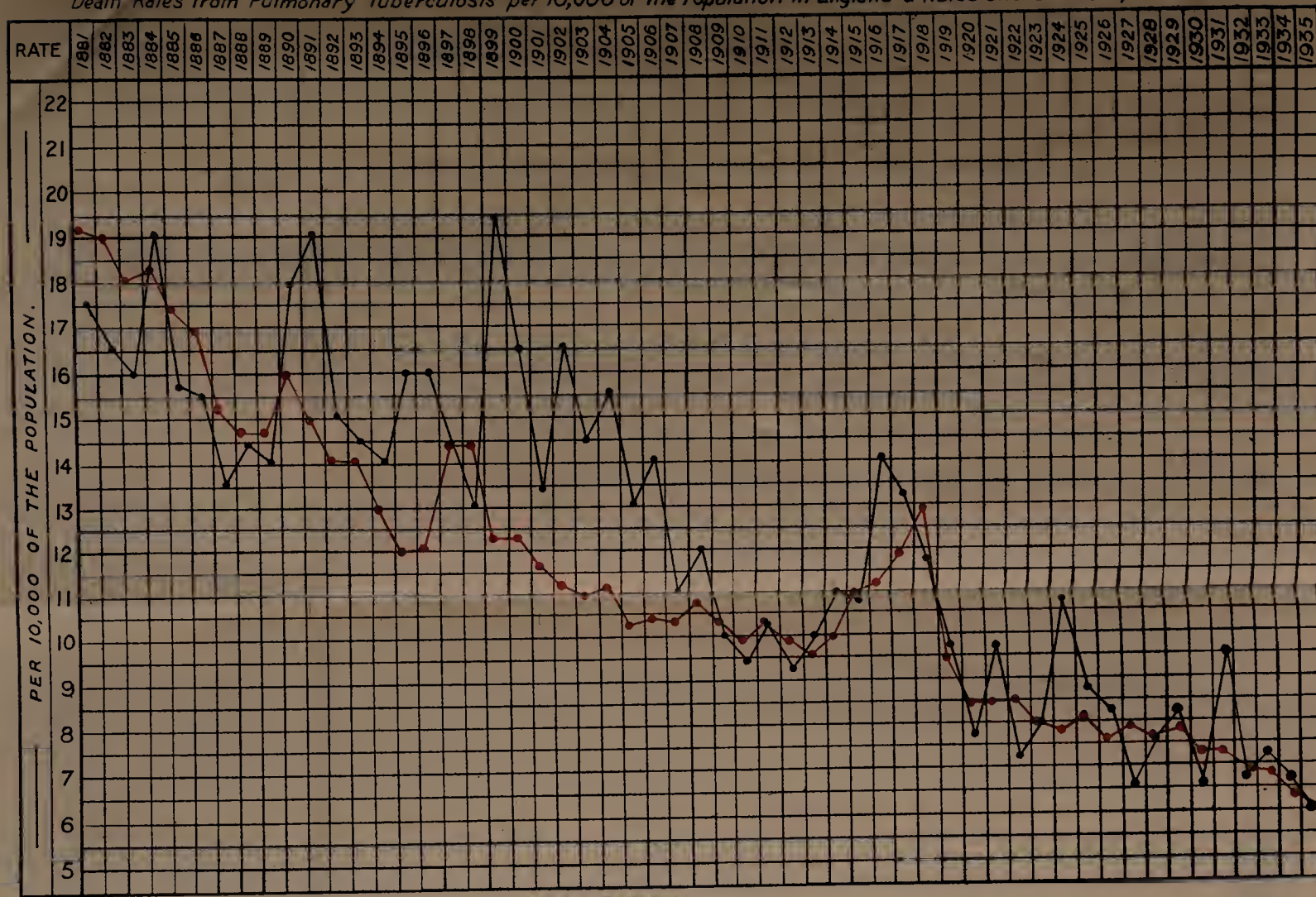
Though the formal notifications do not represent the total number of new cases each year, they form a fairly accurate guide to the incidence of the disease. The gradual fall in incidence since notification commenced in 1912 is seen in Table 19, which also shows the fall that has occurred in the death rate from tuberculosis.

Table 19.
Number of cases notified and number of deaths each year, 1912 to 1935.

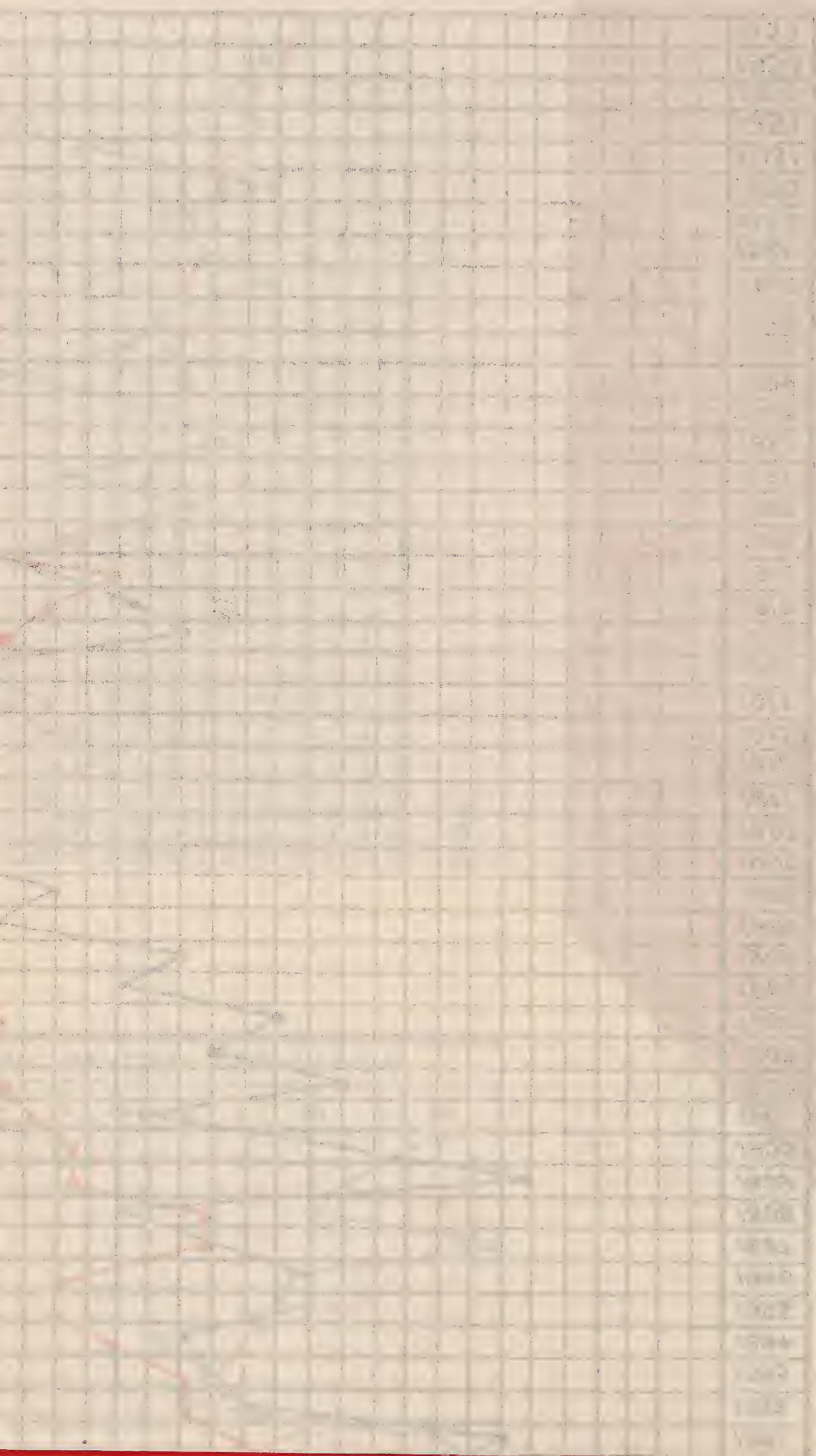
Year	No. of Primary notifications received.		Deaths		Death Rate per 10,000 of population	
	Pulmonary	Non-Pulmonary	Pulmonary	Non-Pulmonary	Pulmonary	Non-Pulmonary
1912	130	—	91	65	9.27	6.02
1913	253	164	100	90	10.05	9.0
1914	207	116	113	65	11.2	6.45
1915	203	126	99	56	10.7	6.07
1916	189	137	127	41	14.1	4.5
1917	198	62	121	42	13.3	4.64
1918	144	40	107	34	11.8	3.75
1919	150	56	99	31	9.8	3.08
1920	221	65	82	37	7.9	3.53
1921	179	63	102	32	9.7	3.05
1922	167	58	78	39	7.3	3.66
1923	141	45	85	27	8.0	2.52
1924	154	75	118	27	10.8	2.48
1925	141	88	97	25	8.8	2.28
1926	140	68	91	32	8.2	2.92
1927	129	61	74	22	6.5	1.95
1928	139	68	84	21	7.6	1.90
1929	130	50	91	24	8.3	2.2
1930	119	53	73	26	6.7	2.4
1931	110	67	103	17	9.5	1.6
1932	141	48	72	16	6.7	1.5
1933	107	60	79	11	7.3	1.0
1934	94	40	72	23	6.7	2.1
1935	83	31	65	9	6.0	0.8

Table 20.

Death Rates from Pulmonary Tuberculosis per 10,000 of the Population in England & Wales and St. Helens, 1881 - 1935



Black: St. Helens.
Red: England and Wales.



Of the 83 cases of pulmonary tuberculosis for which formal notification was received during 1935, 19 died during the year and the average duration of life after notification in these cases was 85.7 days. In 4 cases death occurred within four weeks of notification.

MORTALITY.—During 1935 there were referable to the borough 74 deaths from all forms of tuberculosis, giving a Tuberculosis Death Rate of 6.8 per 10,000 of the population. Of these deaths, 65 were due to pulmonary tuberculosis and 9 to non-pulmonary tuberculosis, giving a pulmonary death rate of 6.0 per 10,000 of the population and a non-pulmonary death rate of 0.8.

These figures are all appreciably better than those for any previous year and it is interesting to note that the Tuberculosis Death Rate for the borough during 1935 (6.8 per 10,000 of the population) was lower than that for England and Wales (7.18 per 10,000).

A significant feature which a study of the incidence and mortality figures reveals, however, is that for the first time since notification commenced the incidence of pulmonary disease among females was higher in 1935 than among males. Furthermore, the reduction in mortality from pulmonary tuberculosis was confined to males, there being actually an increase from 26 deaths among females in 1934 to 31 deaths in 1935.

The marked diminution in the number of deaths from non-pulmonary tuberculosis during 1935 as compared with 1934 was due to the fact that during 1934 a large number of deaths was ascribed to tuberculous meningitis. This occurrence was fortunately not repeated during the year under review.

The ages at which the deaths occurred are shown in Table 18 and the number of deaths and the death rate from each form of the disease since 1912 in Table 19. The death rate from pulmonary tuberculosis since 1881 is shown in Table 20, which also shows the corresponding rates for England and Wales.

TUBERCULOSIS DISPENSARY.—The work of the tuberculosis dispensary during 1935 proceeded along very similar lines to previous years. The primary function as a diagnostic centre continues to be developed and by the employment of modern methods, particularly radiology, in addition to the stethoscope, diagnosis can be made with more accuracy than previously. The confidence of medical practitioners is shown by the number of cases referred by them before notification and the confidence of the public is evident by the increasing number of cases who attend spontaneously. Despite this, however, a regrettably large number of patients have to be classified as advanced when first seen, and it is found that many of them have been attending their doctor for only a brief period. In most cases this has been due to neglect and ignorance, or, in some, the fear of the diagnosis. In others, however, showing clinical and radiological evidence of extensive disease of long standing, there is a history, which the closest investigation cannot shake, of illness only commencing very recently. These latter cases show the insidious nature of the disease which, while causing extensive damage, may give rise to so few symptoms.

At the Tuberculosis Clinic five sessions, including two evening ones, are held weekly for ordinary cases, and one session weekly for X-ray therapy. The practice of inviting patients to attend by appointment is maintained, and works very satisfactorily. Home visiting is carried out as routine by the Health Visitors and the Tuberculosis Nurse, and by the Tuberculosis Officer if required.

A record of the work in connection with the Dispensary during the last five years is shown in Table 21(a).

During 1935, 221 new cases and 135 contacts were added to the Dispensary Register, and 6 cases were transferred from other areas ; 45 cases were discharged from the Register as recovered ; 261 were written off as a non-tuberculous ; 62 died ; 18 were lost sight of or transferred to other areas. This left at the end of the year a total of 667 persons on the Register. Table 21(b) shows the condition at the end of 1935 of all patients on the Dispensary Register.

TABLE 21(a).

Record of work at or in connection with the Tuberculosis Dispensary during the years 1931—1935.

	1931	1932	1933	1934	1935
1. New cases examined for the first time	228	266	241	240	221
2. New contacts examined for the first time	51	86	130	133	135
3. Cases transferred from other areas or returned after discharge from the Register	9	4	3	25	6
Total	288	356	374	398	362
4. New cases and contacts diagnosed to be tuberculous :					
Pulmonary—Adults	74	83	67	69	68
" Children	11	29	15	5	5
Non-pulmonary—Adults	10	9	9	14	5
" Children	24	32	24	16	23
Total	119	153	115	104	101
5. Contacts diagnosed to be tuberculous (<i>included in item 4</i>)	—	6	5	2	2
6. Removed from Dispensary Register as :—					
Non-tuberculous	181	192	254	277	261
Recovered	29	12	90	61	45
Dead (all causes)	79	69	73	64	62
Transferred to other areas or lost sight of	12	30	30	45	18
Total	301	303	447	447	386
7. "Recovered" cases restored to Register (<i>included in items 1 and 4</i>)	—	—	1	—	1
8. Cases on Dispensary Register on 31st December :—					
Diagnosis completed :					
Pulmonary—Adults	260	281	264	278	271
" Children	165	175	171	155	145
Non-Pulmonary—Adults	57	66	55	58	53
" Children	246	260	230	189	180
Diagnosis not completed :					
Adults	7	14	9	6	11
Children	25	17	11	5	7
Total	760	813	740	691	667
9. Pulmonary cases on Register on 31st December which were T.B.+	93	110	120	130	130
10. Consultations with medical practitioners (personal and other)	141	201	110	146	123
11. Sputum examinations	162	150	256	260	170
12. X-ray examinations	—	—	133	364	378
13. Home visits by Tuberculosis Officer	156	160	113	126	74
14. Home visits by Nurses or Health Visitors	1556	1581	1578	1903	2043
15. Attendances at Dispensary	2787	2644	2928	2781	2358

Of the 221 cases examined for the first time during 1935, 94 were referred by medical practitioners, 46 were referred by the medical officers of the maternity and child welfare or school medical services, 22 sought the services of the clinic spontaneously and 59 were notified prior to their initial attendance. The percentage of actual cases of tuberculosis seen by the Tuberculosis Officer before notification, was 40.3%, as compared with 33.3% in 1934.

During 1935, home disinfection of premises and bedding was carried out in 582 instances, a decrease of 171 compared with the previous year.

Unfortunately, the Dispensary still lacks an after-care service. Until this is provided its organization must remain incomplete, nor can it fulfil its functions satisfactorily.

There are no special arrangements under the Tuberculosis Scheme for the provision of home nursing in St. Helens, but many of the cases are dealt with by the St. Helens and District Nursing Association, to whom the Committee make a grant. Shelters for the use of patients at home are not provided in St. Helens.

No case came to notice in which action was required under the Public Health (Prevention of Tuberculosis) Regulations, 1925 (control of tuberculous persons employed in the milk trade), nor was it necessary to obtain compulsory removal to hospital of any patients under Section 62 of the Public Health Act, 1925.

NON-PULMONARY TUBERCULOSIS.—At the X-ray department 39 cases of tuberculous adenitis and 17 cases of tuberculous skin affections made 951 attendances for treatment. This form of treatment is, however, very unsatisfactory, and should be superseded by ultra-violet therapy.

One case of disseminated lupus was sent to London for Finsen light treatment and is still undergoing treatment there. This case is making excellent progress.

Cases of bone and joint tuberculosis in children continue to be dealt with under the Council's Orthopaedic Scheme and details

Supplementary Annual Return showing in summary form (a) the condition at the end of 1935 of all patients remaining on the Dispensary Register ; and (b) the reasons for the removal of all cases written off the Register.

[illegible]

Table 21(b).

PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1935 of all patients remaining on the Dispensary Register ; and (b) the reasons for the removal of all cases written off the Register.

The Table is arranged according to the years in which the patients were first entered on the Dispensary Register as definite cases of pulmonary tuberculosis, and their classification at that time.

Condition at the time of the last record made during the year to which the return relates.			Previous to 1926				1926				1927				1928				1929				1930				1931				1932				1933				1934				1935															
			Class T. B. plus				Class T. B. plus				Class T. B. plus				Class T. B. plus				Class T. B. plus				Class T. B. plus				Class T. B. plus				Class T. B. plus				Class T. B. plus				Class T. B. plus																			
			Class T. B. minus	Group 1	Group 2	Group 3	Total (Class T. B. plus)	Class T. B. minus	Group 1	Group 2	Group 3	Total (Class T. B. plus)	Class T. B. minus	Group 1	Group 2	Group 3	Total (Class T. B. plus)	Class T. B. minus	Group 1	Group 2	Group 3	Total (Class T. B. plus)	Class T. B. minus	Group 1	Group 2	Group 3	Total (Class T. B. plus)	Class T. B. minus	Group 1	Group 2	Group 3	Total (Class T. B. plus)	Class T. B. minus	Group 1	Group 2	Group 3	Total (Class T. B. plus)	Class T. B. minus	Group 1	Group 2	Group 3	Total (Class T. B. plus)	Class T. B. minus	Group 1	Group 2	Group 3	Total (Class T. B. plus)	Class T. B. minus	Group 1	Group 2	Group 3	Total (Class T. B. plus)						
Disease Arrested	Adults	M.	4	2	1	1	4	1	—	—	—	—	2	1	—	—	1	—	—	—	—	1	—	—	—	—	2	1	—	—	—	—	1	—	—	—	—	1	—	—	—	—	1	—	—	—	—	1	—	—	—	—						
			F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—							
Disease not Arrested	Children	4	—	—	—	—	1	—	—	—	—	3	—	—	—	—	2	—	—	—	—	3	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
		Adults	M.	7	—	4	4	8	2	—	—	—	—	—	—	1	1	2	3	—	—	—	—	4	—	—	—	—	2	—	1	1	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—							
Condition not ascertained during the year.	Children	F.	—	—	—	1	1	2	—	2	1	3	—	—	—	—	1	—	1	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—							
		3	—	—	2	2	2	—	—	—	—	2	—	—	1	1	3	—	—	—	—	2	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—								
Total on Dispensary Register at 31st December.			23	1	—	1	2	13	—	—	—	—	7	—	—	—	—	18	—	—	—	—	7	—	—	—	—	16	2	1	2	5	13	1	1	—	2	13	1	1	—	2	3	1	1	—	2	4	1	1	—	2	—	—	—	—		
Discharged as Recovered	Adults	M.	33	1	—	—	1	4	—	—	—	—	1	—	—	—	—	2	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
			F.	27	—	—	—	—	4	—	—	—	—	1	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
			Children	40	—	—	—	—	7	—	—	—	—	6	—	—	—	—	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Lost sight of or otherwise removed from Dispensary Register.			195	4	5	10	19	57	2	1	—	3	29	1	—	—	1	30	1	—	—	1	21	—	—	—	—	40	1	1	1	3	7	2	1	—	3	4	2	2	—	4	5	—	—	—	—	2	—	1	—	1	—	—	—	—		
Dead	Adults	M.	54	5	19	50	74	14	4	3	29	36	12	1	1	25	27	16	—	—	18	18	16	—	5	14	19	8	4	6	16	26	5	3	1	17	21	1	2	9	18	29	3	—	6	12	18	4	—	5	14	19	2	—	2	6	8	
			F.	28	4	10	31	45	17	2	8	14	24	9	—	—	9	9	7	—	1	17	18	10	—	1	14	15	2	5	3	10	18	2	4	—	12	16	2	1	3	12	16	1	—	5	14	19	1	—	8	6	14	1	—	2	3	5
			Children	9	—	1	10	11	2	—	—	5	5	3	—	1	5	6	3	—	—	2	2	2	—	—	2	2	—	—	1	—	2	3	—	2	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total written off Dispensary Register			386	14	35	101	150	105	8	12	48	68	61	2	2	39	43	67	1	1	37	39	54	—	6	30	36	51	11	10	29	50	14	11	2	31	44	7	5	15	30	50	9	—	11	27	38	7	—	14	22	36	3	—	4	9	13	
GRAND TOTALS			428	17	40	110	167	126	8	14	49	71	76	3	3	41	47	99	1	2	37	40	71	—	9	31	40	75	14	16	32	62	38	12	6	33	51	58	8	24	32	64	30	3	20	34	57	23	5	26	26	57	26	2	20	19	41	

of this are given in the Orthopaedic section of the Report. A close liaison has been established between the Leasowe Open Air Hospital, the Royal Liverpool Children's Hospital, the Royal Southern Hospital and the Tuberculosis Dispensary, with the result that all necessary facilities are now available and are being utilised in the treatment of bone and joint diseases at all ages.

During 1935 patients suffering from the following types of disease received in-patient treatment at various institutions :—

Bones and Joints	.....	.....	.....	.....	.....	.....	.....	32
Abdominal	.....	.....	.....	.....	.....	.....	.....	3
Other Organs	.....	.....	.....	.....	.....	.....	.....	3
Peripheral Glands	.....	.....	.....	.....	.....	.....	.....	9

DENTAL TREATMENT.—In-patients at Eccleston Hall Sanatorium are examined regularly by the dental surgeon, and minor treatments such as extractions, fillings, etc., are carried out and in special cases dentures are supplied. There is no special scheme for dealing with patients attending the Dispensary but urgent cases are from time to time referred to the dental surgeon for treatment.

During the year 73 patients were treated at Eccleston Hall Sanatorium, including 3 to whom dentures were supplied, and from the Tuberculosis Dispensary 15 cases were treated, including two denture cases.

INSTITUTIONAL TREATMENT.—Institutional treatment for cases of tuberculosis in St. Helens is provided as follows :—

(a)—Eccleston Hall Sanatorium :—maintained by the St. Helens Corporation. This institution contains 70 beds with accommodation for approximately 32 men, 18 women, and 20 children.

During the year further advance was made in the improvement of the grounds. New exercise walks and new recreation grounds are being developed. The bulk of the work is being carried out by an ex-patient and it has been very instructive to see the large amount of reasonably heavy manual labour he can perform without in any way

distressing himself. In general health he has in fact vastly improved since he commenced work about a year ago, and it is a striking example of how these patients might be helped.

The development of active measures of treatment for pulmonary tuberculosis has been the most significant feature of the year's work. Artificial pneumothorax was induced in 7 cases and the number of refills totalled 90. Cases discharged from the Sanatorium attend as out-patients for continuation treatment. A course of gold salts was given to 11 in-patients, 2 of whom were also undergoing collapse therapy.

During the year, the blood sedimentation test was introduced. This is a simple and fairly rapid means of ascertaining the degree of toxæmia present, and a series of tests taken at regular intervals forms a valuable guide as to the patient's response to treatment. During the last two months of the year 57 of these tests were carried out.

The Sanatorium school provides education for child inmates able to attend, and bedside tuition is given to those medically fit to benefit therefrom. Of the 46 children in the Sanatorium during the year 44 attended the school for an average period of 96 days each. The average daily attendance at the school was 15.

(b)—Four beds are reserved at the Liverpool Sanatorium, Delamere, for early pulmonary cases.

(c)—Seven beds are reserved at the Leasowe Open-Air Hospital for Children, for non-pulmonary cases.

(d)—Occasional beds are taken as and when required for special cases at various institutions.

In addition to the above, 60 beds are available and used as required for pulmonary or non-pulmonary poor law cases at the Whiston Infirmary, Prescott.

Table 22 shows the immediate results of treatment of patients discharged from residential institutions during the year, and Table 23 shows the extent of institutional treatment provided.

Table 22.

Return showing the immediate results of treatment of definitely tuberculous patients and of observation of doubtful cases discharged from approved Residential Institutions during the year 1935.

Classification on admission to the Institution		Condition at time of discharge	Duration of Residential Treatment in the Institution.															Grand Totals
			Under 3 months			3—6* months			6—12 months			More than 12 months			Totals			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Pulmonary Tuberculosis	Class T.B. minus.	Quiescent	1	—	—	5	2	2	1	—	2	—	—	—	7	2	4	13
		Not Quiescent	1	—	1	2	—	—	—	1	—	—	—	—	3	1	1	5
		Died in Institution ...	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	1
	Class T.B. plus Group 1	Quiescent	—	—	—	1	1	—	—	—	—	—	—	—	1	1	—	2
		Not Quiescent	1	1	—	—	—	—	1	—	—	—	—	—	2	1	—	3
		Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class T.B. plus Group 2	Quiescent	—	—	—	—	1	—	2	—	—	2	—	—	4	1	—	5
		Not Quiescent	1	5	—	3	4	—	5	—	1	1	—	—	10	9	1	20
		Died in Institution ...	1	—	—	1	—	—	—	2	—	—	—	—	2	2	—	4
	Class T.B. plus Group 3	Quiescent	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	1
		Not Quiescent	3	—	—	2	—	—	6	1	—	2	2	—	13	3	—	16
		Died in Institution ...	2	—	—	2	1	1	1	—	1	1	—	—	6	1	2	9
Non-Pulmonary Tuberculosis	Bones and Joints	Quiescent	—	—	—	—	—	—	1	2	—	2	—	1	3	2	1	6
		Not Quiescent	—	—	—	—	—	1	—	—	—	1	1	—	1	1	1	3
		Died in Institution ...	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	1
	Abdominal	Quiescent	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	1
		Not Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Other Organs	Quiescent	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	1
		Not Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Peripheral Glands	Quiescent	—	—	—	—	—	2	—	—	2	—	—	—	—	—	4	4
		Not Quiescent	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	1
		Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Diagnosis on discharge from observation.					For Pulmonary Tuberculosis						For Non-Pulmonary Tuberculosis						Totals		
					Stay under 4 weeks			Stay over 4 weeks			Stay under 4 weeks			Stay over 4 weeks					
					M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous ...	...	...	...	...	1	—	—	—	—	1	—	—	—	—	—	1	1	—	2
Non-tuberculous	...	...	...	...	1	—	1	4	—	10	—	—	1	—	—	—	5	—	12
Doubtful	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS ...					2	—	1	4	—	11	—	—	1	—	—	1	6	—	14

NOTE—PULMONARY TUBERCULOSIS : Patients suffering from this disease are now divided into two classes, viz : *Class T.B. minus*, which comprises those patients in whose sputum tubercle bacilli have never been found : *Class T.B. plus* which comprises those cases in which tubercle bacilli have at any time been found.

Class T.B. plus is further sub-divided into three groups. *Group 1* comprises early cases who will probably have their disease arrested by a period of Sanatorium treatment. *Group 3* includes advanced cases and cases with grave complications, e.g., diabetes and *tuberculosis* of larynx or intestine. *Group 2* includes all cases of *Class T.B. plus* who cannot be placed in groups 1 and 3.

TABLE 23.

Institutional Treatment during the year 1935.

(a)—in Non-Poor Law Institutions.

		In Institutions on Jan. 1	Admitted during the year	Discharged during the year	Died in the Institutions	In Institutions on Dec. 31
Number of doubt- fully tuberculous cases admitted for observation	Adult Males	1	5	6	—	—
	Adult Females	—	—	—	—	—
	Children	1	15	14	—	2
	Total	2	20	20	—	2
Number of patients suffering from pul- monary tuberculosis	Adult Males	31	52	45	12	26
	Adult Females	13	25	18	4	16
	Children	7	6	7	2	4
	Total	51	83	70	18	46
Number of patients suffering from non-pulmonary tuberculosis	Adult Males	4	3	4	—	3
	Adult Females	5	2	5	1	1
	Children	16	14	13	—	17
	Total	25	19	22	1	21
Grand Total		78	122	112	19	69

(b)—in Poor Law Institutions.

		In Institutions on Jan. 1.	Admitted during the year	Discharged during the year	Died in the Institutions	In Institutions on Dec. 31
Number of pat- ients suffering from pulmonary tuberculosis admitted for treatment	Adult Males	3	10	4	4	5
	Adult Females	1	4	2	1	2
	Children	—	—	—	—	—
	Total	4	14	6	5	7
Number of pat- ients suffering from non-pulmon- ary tuberculosis admitted for treatment	Adult Males	2	2	1	—	3
	Adult Females	1	—	—	—	1
	Children	1	6	5	1	1
	Total	4	8	6	1	5
Grand Total		8	22	12	6	12

VI.—VENEREAL DISEASES.

The arrangements for treatment and for the bacteriological examination of specimens remained as in previous years.

An analysis of the work carried out at or in connection with the Venereal Diseases Centre is shown in Table 24, and Table 25 shows the number of new cases each year since 1923.

From Table 25 it will be seen that there was an increase in 1935 in the number of male and female cases of syphilis coming under treatment for the first time. An analysis of these cases showed that some were referred from areas outside the Borough ; others were cases of long standing infection where treatment had been neglected and a relapse had occurred, or where treatment had never been sought at the time of contracting the disease. There was no evidence pointing to any new active focus of infection in the town.

New cases of gonorrhoeal infection amongst males remained at approximately the same level. There was a slight increase in the number of female cases, which has been noticeably on the rise during the past 10 years. It should be remembered, however, that the services provided by the ante-natal and gynaecological clinics in the town result in earlier diagnosis of these cases and consequent sifting out and transfer to the Venereal Diseases Centre for appropriate treatment.

The reconstruction of the male irrigation room, which was carried out last year, while not yet adequate to provide for a centre of population such as St. Helens, has considerably facilitated the work of treatment.

Record of work carried out at or in connection with the
Venereal Diseases Centre during 1935.

	Syphilis		Soft Chancre		Gonorrhoea		Conditions other than Venereal		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
1. Number of cases on 1st January under treatment or observation	7	17	1	—	12	19	—	6	20	42	
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	1	5	—	—	1	3	—	—	2	8	
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4)	11	10	—	—	40	21	19	32	70	63	133
4. Number of cases dealt with for the first time during the year under report known to have received treatment at other Centres for the same infection	—	—	—	—	3	—	—	—	3	—	
Totals of Items 1, 2, 3 and 4.....	19	32	1	—	56	43	19	38	95	113	208
5. Number of cases discharged after completion of treatment and final tests of cure (see Item 15)	1	1	—	—	24	8	19	35	44	44	88
6. Number of cases which ceased to attend before completion of treatment.	5	3	—	—	2	6	—	—	7	9	16
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure	—	—	1	—	9	—	—	—	10	—	10
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners	1	—	—	—	6	3	—	—	7	3	10
9. Number of cases remaining under treatment or observation on 31st December	12	28	—	—	15	26	—	3	27	57	84
Totals of Items 5, 6, 7, 8 and 9.....	19	32	1	—	56	43	19	38	95	113	208
10. Number of cases of syphilis included in Item 6 which failed to complete one course of treatment	2	—	—	—	—	—	—	—	2	—	
11. Number of attendances— (a) for individual attention of the medical officers	229	295	—	—	608	148	31	106	868	549	1417
(b) for intermediate treatment, e.g., irrigation, dressing	34	137	—	—	2922	1197	35	—	2991	1334	4325
TOTAL ATTENDANCES	263	432	—	—	3530	1345	66	106	3859	1883	5742

Table 24—continued.

	Syphilis		Soft Chancre		Gonorrhoea		Conditions other than Venereal		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
In-patients :—											
(a) Total number of persons admitted for treatment during the year	—	—	—	—	—	1	—	—	—	1	1
(b) Aggregate number of "in-patient days" of treatment given	—	—	—	—	—	38	—	—	—	38	38
	Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Number of cases of congenital syphilis in Item 3 above classified according to age periods	—	—	—	—	3	1	—	1	3		2

TABLE 25.

Number of Cases of Venereal Diseases dealt with for the first time during the years 1923 to 1935.

Year	SYPHILIS		SOFT CHANCRE		GONORRHOEA	
	Males	Females	Males	Females	Males	Females
1923	18	11	—	—	34	2
1924	19	15	—	—	30	9
1925	14	29	1	—	26	4
1926	36	40	2	—	33	9
1927	32	39	4	—	42	14
1928	44	26	3	—	62	11
1929	22	25	2	—	55	14
1930	16	32	1	—	40	14
1931	6	13	—	—	22	16
1932	3	11	—	—	24	21
1933	7	11	—	—	32	18
1934	6	6	2	—	42	19
1935	11	10	—	—	43	21

**VII.—SUMMARY (for reference) of Nursing Arrangements,
Hospitals, and other Institutions available
for the district.**

HOME NURSING.—The St. Helens and District Nursing Association, supported by voluntary contributions, maintain a superintendent, two assistant superintendents, and twenty nurses to attend non-infectious cases in their own homes. 3,106 cases were nursed during the year, the total number of visits amounting to 132,213.

Arrangements are in operation for the Association to undertake for the Corporation the home nursing of cases of puerperal fever and puerperal pyrexia, and of certain infectious diseases in children under 5 years of age.

MIDWIVES.—No district midwives are employed or subsidised by the public health authority. In exceptional cases, however, where the patient has been unable to do so by reason of poverty, the Council have paid the midwife's fee.

CLINICS AND TREATMENT CENTRES.—The following clinics and treatment centres are provided by the Corporation :

(1).—**Child Welfare Clinics**—For children under 5 years of age.

- (a) Town Hall CentreOpen Monday and Thursday, 2 to 4 p.m. For North and South Windle, Hardshaw and Blackbrook districts.
- (b) Albion Street CentreOpen Tuesday and Friday, 2 to 4 p.m. For Eccleston, Newtown, Dentons Green, Cowley Hill and Central Districts.
- (c) Elizabeth Street Centre Open Tuesday 2 to 4 p.m. For Sutton District.
- (d) Gartons Lane CentreOpen Wednesday, 3 to 4 p.m. For Marshalls Cross, Sutton Manor and Clock Face Districts.

(e) West Street CentreOpen Thursday, 2 to 4 p.m. For Thatto Heath District.

(f) Nunn Street CentreOpen Wednesday, 2 to 4 p.m. For Derbyshire Hill and Parr Districts.

(2).—Ante-natal Clinics—For ante-natal cases only.

(a) Town Hall CentreTuesday, and Friday, 2 to 4 p.m.

(b) Elizabeth Street Centre Thursday, 10 to 11 a.m.

(c) Gartons Lane Centre.....Wednesday, 2 to 3 p.m.

(d) West Street CentreMonday, 2 to 4 p.m.

(e) Nunn Street CentreWednesday, 10 to 11 a.m.

(3).—Gynaecological and Post-natal Clinic.—For diseases or disablements associated with child-bearing.

Town Hall Centre.....Tuesday, 11 to 12 noon.

(4).—Test-feeding Clinic.—For nursing mothers.

Albion Street Centre—Tuesday and Thursday, 9 to 12 noon.

(5).—Sunlight Clinic.—For weakly and rachitic children.

Town Hall Centre—Tuesday and Friday, 9 to 10-30 a.m.

(6).—School Clinic, Claughton Street.—For treatment of minor ailments, throat and nose defects, eyes, and dental defects and the X-ray treatment of ringworm. Minor ailments and dental defects are treated daily from 9 a.m. to 5 p.m. (Saturdays 9 a.m. to 12 noon) and other defects on special days. The Dental Department is at Old Bank House. A scale of income has been drawn up for recovery of cost of treatment in non-necessitous cases.

District Clinics for the treatment of minor ailments are also open for a few hours daily at Derbyshire Hill, Sutton, Sutton Manor and Thatto Heath, and, after school dental inspection, Dental Clinics are held at Sutton, Sutton Manor and Thatto Heath for varying periods.

- (7).—**Tuberculosis Dispensary, Claughton Street.**—Open Monday from 5-30 to 7 p.m., Wednesday from 10 to 11-30 a.m., Thursday from 3 to 4-30 p.m., and Friday from 10 to 11-30 a.m. and from 5-30 to 7 p.m.
- (8).—**Venereal Diseases Centre, Claughton Street.**—Open for males on Monday, 5-30 to 7 p.m., and for females, Wednesday, 5-30 to 7 p.m. The centre is also open daily from 9 a.m. to 5 p.m. on Monday to Friday, and to 12 noon on Saturday, for irrigation, advice and prophylactic treatment.
- (9).—**Orthopaedic Clinic.**—At the Maternity and Child Welfare Centre, Albion Street. Orthopaedic Surgeon attends on 2nd and 4th Wednesdays of each month, from 2 p.m. to 4 p.m. Intermediate treatments are given by the orthopaedic nurse daily at Albion Street Clinic, and once weekly at the Elizabeth Street, Gartons Lane, West Street and Nunn Street Maternity and Child Welfare Centres.
- (10).—**Immunisation Clinic.**—For immunising children against Diphtheria. Tuesday and Wednesday at 2 p.m. at the School Clinic, Claughton Street.

HOSPITALS.—

Provided by the Council :—

- (1)—Borough Isolation Hospital, Peasley Cross. For Infectious Diseases (other than smallpox). Beds : 94. Resident staff : matron and 23-25 nursing staff. Admissions and discharges are under the control of the Medical Officer of Health, but patients are treated by their own medical practitioners. The Corporation provide specialist services in necessitous cases when required. Cases are also admitted from the Haydock Urban District Council.
- (2)—Eccleston Hall Sanatorium. For Pulmonary and convalescent or non-active Non-Pulmonary Tuberculosis. Total Beds : 70. Resident Staff : one medical officer, sister-in-charge and 15 nursing staff. Non-resident female teacher. Orthopaedic Surgeon visits periodically. Cases are also admitted from the Lancashire County Council.

- (3)—The St. Helens Maternity and Child Welfare Hospital, Cowley Hill. For maternity cases and for ailing and debilitated children. Beds : maternity, 15 ; ailing and debilitated children, 22. Resident staff : medical officer, matron, and 15 nursing staff.

Subsidised by Council :—

- (1)—Sankey Smallpox Hospital for cases of smallpox. St. Helens pays an annual retaining fee to the Warrington Corporation and the costs of treatment of any patient admitted from St. Helens.
- (2)—Whiston Infirmary, Prescott. Transferred from the Prescott Board of Guardians to the Lancashire County Council under the Local Government Act, 1929.—Total Beds available approximately 500.

There are two resident medical officers and one non-resident, with a visiting oculist, visiting dentist and visiting orthopaedic surgeon, while the medical superintendent has authority to call in any specialist or consultant assistance if he wishes. The pathological work is carried out at the County Mental Hospital, Rainhill. The infirmary is used almost entirely for the reception of Poor Law cases, though a small percentage of private cases is admitted. By an arrangement with the Lancashire County Council, all Poor Law cases from St. Helens are admitted to this Institution.

- (3)—An average of 8 beds is also retained at the Leasowe Open-Air Hospital for Children and 4 at Delamere Sanatorium, and in-patients are sent to other hospitals or institutions as required.

Other Hospitals.—*The St. Helens Hospital.*—Supported partly by subscribers and partly by contributions. For all medical and surgical non-infectious cases. Also 17 beds for maternity cases. Total accommodation about 164 beds. Out-patient department for Ophthalmic, Ear, Throat and Nose, and Gynaecological cases.

The Providence Free Hospital.—Accommodation for about 130 patients (general medical and surgical cases).

Ambulance facilities.—For infectious cases, two ambulances are maintained by the Corporation at the Peasley Cross Isolation Hospital. Both general hospitals maintain ambulances and these are used as required. The Police also maintain an ambulance for street accident cases.

VIII.—MATERNITY AND CHILD WELFARE.

NOTIFICATION OF BIRTHS.—Under the Notification of Births Acts, 2,263 live births and 112 still-births were notified during the year. For these, 2,223 notifications were received from midwives and 152 from doctors. The total number of live births belonging to St. Helens for the year was 2,026 as compared with 2,065 in 1934, and the birth rate for the year was 18.7 per 1,000 of the population as compared with 19.1 per 1,000 during 1934.

INFANT MORTALITY.—During 1935, 2,026 births were registered for St. Helens, and the deaths of 191 infants under one year of age occurred, giving an infant mortality rate of 94.3 per 1,000 births as compared with 65.4 for the previous year. Of the 191 deaths under one year, 186 were legitimate children and 5 illegitimate children, giving a legitimate infant mortality rate of 93.9 per 1,000 legitimate births and an illegitimate infant mortality of 111.1 per 1,000 illegitimate births. The infant mortality for England and Wales was 57 per 1,000 births, and for the 121 County Boroughs and Great Towns 62 per 1,000 births.

The principal causes of the deaths in 1935 were as follows :—

Congenital debility, malformations and premature birth.....	95
Pneumonia	30
Bronchitis and other respiratory diseases	11
Whooping Cough and Measles	12
Diarrhoea, etc.	15
Other Digestive Diseases	9
Tuberculosis	2
Influenza.....	4
Syphilis	1
Other Causes	12
	<hr/>
	191
	<hr/>

The following statement reviews the infant death rates per 1,000 births under the principal causes in the years 1930 to 1935.

Infant Mortality per 1,000 Births.						
	1930	1931	1932	1933	1934	1935
Congenital Debility, mal-formation and premature birth	39.27	41.32	42.59	47.44	40.19	46.90
Pneumonia, Bronchitis and other respiratory diseases	17.07	19.74	25.00	33.01	10.17	22.22
Measles and Whooping Cough	2.99	3.21	—	8.77	1.45	5.92
Diarrhoea, etc.	4.26	3.67	7.41	5.67	2.91	7.40
All other Diseases	16.21	20.21	14.35	20.63	10.65	11.85

The ages at which these deaths occurred during the past five years are shown in the following statement :—

Infant Mortality per 1,000 Births.					
	1931	1932	1933	1934	1935
Deaths under 1 day old	16.99	14.83	14.44	13.56	15.30
Deaths 1 to 7 days old	13.77	14.83	15.47	10.65	15.30
Deaths 1 to 4 weeks old	10.56	9.72	15.47	11.62	14.81
Total mortality under 1 month old, <i>i.e.</i> , neo-natal deaths	41.32	39.38	45.38	35.83	45.41
Deaths 4 weeks to 3 months old	11.02	19.91	19.03	7.26	13.82
Deaths 3 to 6 months old	13.33	10.65	18.57	8.71	15.80
Deaths 6 to 12 months old	22.48	19.44	32.49	13.56	19.24

The toll on infant lives in St. Helens during 1935 was, unfortunately, high ; the infant mortality rate of 94.3 per 1,000 births being the second highest since 1929. St. Helens does not appear to be alone in this, however, as more than half the other County Boroughs in Lancashire also had increased infant mortality rates. The rate for St. Helens was, however, the second highest of all the Lancashire Boroughs.

The cause of the increase in St. Helens was, undoubtedly, in the main the prevalence of whooping cough and measles. These diseases not only exact, themselves, a heavy toll on infant lives, but they leave behind them a large number of damaged children who succumb to attacks of bronchitis and pneumonia. Compared with the previous year the infant death rate for measles and whooping cough was more

than quadrupled, and that for pneumonia, bronchitis and respiratory diseases more than doubled. The diarrhoea death rate was also more than doubled—again mainly a sequela of the measles and whooping cough outbreak.

There was also during the year some increase in the number of deaths from congenital defects leading to an increased neo-natal mortality. That nearly one half of the infant mortality is due to congenital defects stresses the fact that ante-natal supervision is essential not only in the interest of the mother's health but also for the welfare of the child.

STILL BIRTHS.—The number of still births registered in St. Helens during the year was 113. Of these, 9 belonged to other districts and 2 which occurred in other districts belonged to St. Helens, so that the total number belonging to St. Helens was 106. All the still births occurring in the borough were notified under the Notification of Births Acts.

The following statement shows the number of still births for St. Helens since 1928 compared with the number of live births and expressed as a percentage of the total live and still births.

Year	No. of Live Births.	No. of Still Births.	Total Births.	No. of Still Births expressed as a percentage of the Total Births.
1928	2405	105	2510	4.2
1929	2259	107	2366	4.5
1930	2343	108	2451	4.4
1931	2178	103	2281	4.5
1932	2160	104	2264	4.6
1933	1939	121	2060	5.9
1934	2065	116	2181	5.3
1935	2026	106	2132	4.9

Special enquiries are made into all still births that occur, and from such enquiries into the 112 cases notified in St. Helens during 1935, the cause of still birth in these cases would appear to be as follows, viz. :—

CONDITION IN MOTHER.				CONDITION IN CHILD.			
Renal disease	.....	.....	28	Prolapse of cord	.....	.....	3
Placenta praevia	.....	.....	10	Prematurity	.....	.....	19
Accidental haemorrhage	.....		10	Monstrosity	.....	.....	8
Difficult labour	.....	.....	9	Malpresentation	.....	.....	9
Cause not known	.....	.....	15				
Syphilis	.....	.....	1				
			—				—
			73				39
			—				—

MATERNAL DEATHS.—During 1935, 5 deaths (2 from puerperal sepsis and 3 from other puerperal causes) were registered as resulting from diseases or accidents of pregnancy. The maternal mortality for the year was, therefore, 2.35 per 1,000 live and still births which is the second lowest figure recorded for St. Helens during the last 20 years. Table 26 shows the maternal mortality since 1911.

As usual, however, in the course of the special investigations made into all maternal deaths known to occur, further deaths were discovered in which no doubt the pregnancy had considerable bearing on the fatal issue. If these be included, the total number of maternal deaths in St. Helens during 1935 is increased to 11, giving a maternal mortality rate of 5.16 per 1,000 live and still births. The corresponding rate for 1934 was 6.9 per 1,000.

As a result of the enquiries made the true cause of death in these 11 mothers was found to be :—

Eclampsia	.....	.....	.....	.....	.....	.....	3
Puerperal sepsis	.....	.....	.....	.....	.....	.....	2
Chronic nephritis	.....	.....	.....	.....	.....	.....	2
Haemorrhage following abortion	.....	.....	.....	.....	.....	.....	1
Rheumatic heart	.....	.....	.....	.....	.....	.....	1
Bronchitis and heart disease	.....	.....	.....	.....	.....	.....	1
Asthma and heart failure	.....	.....	.....	.....	.....	.....	1

TABLE 26.
Maternal Mortality.

Year	No. of Live Births	No. of women registered as dying from diseases and accidents of pregnancy and child birth.	Maternal Mortality per 1,000 live births.	Maternal Mortality per 1,000 live and still births.
1911	3247	10	3.08	—
1912	3137	6	1.91	—
1913	3199	9	2.81	—
1914	3357	17	5.06	—
1915	2966	16	5.39	—
1916	2599	9	3.46	—
1917	2217	10	4.51	—
1918	2435	13	5.34	—
1919	2687	18	6.7	—
1920	3334	17	5.1	—
Average for years 1911/1920	—	—	4.3	—
1921	3059	15	4.9	—
1922	2813	11	3.91	—
1923	2615	3	1.14	—
1924	2628	17	6.47	—
1925	2630	14	5.32	—
1926	2561	11	4.29	—
1927	2359	8	3.39	—
1928	2405	11	4.57	—
1929	2259	13	5.75	—
1930	2343	12	5.12	—
Average for years 1921/1930	—	—	4.5	—
1931	2178	7	3.21	3.07
1932	2160	9	4.17	3.97
1933	1939	11	5.67	5.34
1934	2065	11	5.33	5.04
1935	2026	5	2.47	2.35
Average for years 1931/1935	—	—	4.15	3.94

INFECTIOUS DISEASES IN MOTHERS AND CHILDREN.

Puerperal Fever and Puerperal Pyrexia.—9 cases of puerperal fever and 14 cases of puerperal pyrexia were notified, and 2 deaths were registered as occurring from puerperal sepsis.

The subsequent diagnoses of the 23 cases notified were as follows :—

Pelvic infection (localised)	10
Puerperal Septicaemia	5
Pneumonia	4
Bronchiectasis	1
Bronchitis	1
Influenza	1
Phthisis	1
	—
	23
	—

Of the 5 cases of generalised septicaemia 2 followed abortion (one at home and one in hospital), 1 developed after an emergency Caesarean Section in hospital, 1 after instrumental delivery in hospital, and 1 after normal delivery at home. 2 of these cases died—one of which had followed abortion and the other an instrumental delivery.

Of the 10 cases of localised pelvic infection 6 followed abortion, 3 followed normal delivery, and 1 followed instrumental delivery. All made good recoveries.

That nearly one half of the cases of sepsis notified (7 out of 15 notified) followed abortion is an indication of the serious risk attendant on this method of termination of the pregnancy.

For these cases beds are available at the Borough Isolation Hospital and, by arrangement with the District Nursing Association, home nursing can be supplied on request.

Of the cases notified, 18 were treated at the Isolation Hospital, 4 at the St. Helens Hospital, and 1 at the Providence Hospital.

The services of the Consultant Obstetrician are available for these cases and his advice was sought on two occasions.

Ophthalmia Neonatorum.—14 cases were notified during the year. 10 of these were treated at home under the Council's arrangements with the District Nursing Association, 1 was admitted to the Isolation Hospital for treatment and 3 were nursed at home by relatives under the supervision of the medical practitioner in attendance. All recovered with vision unimpaired.

Pemphigus.—An outbreak of pemphigus neonatorum occurred in a midwife's practice in May. Six cases were investigated ; the midwife was suspended from duty, and her house, clothing and instruments disinfected. No further cases occurred. All six cases were cured.

Other Infectious Diseases.—Table 27 shows the number of cases of infectious diseases which occurred in children under 5 years of age and the deaths resulting therefrom.

Table 27.
Infectious diseases at ages 0-1 and 1-5 years.

	Under 1 year		1—5 years	
	Cases	Deaths	Cases	Deaths
Scarlet Fever	1	—	164	2
Diphtheria	1	—	52	5
Measles	96	3	896	9
Whooping Cough	119	9	601	6
Pneumonia	41	30	92	20
Ophthalmia Neonatorum	14	—	—	—
Erysipelas	1	—	1	—
Acute Poliomyelitis	—	—	1	1
Cerebro Spinal Fever	—	—	1	1

Home Nursing and Hospital arrangements.—By arrangement with the St. Helens and District Nursing Association, home nursing of cases of whooping cough, measles, ophthalmia neonatorum and pneumonia in children under 5 years of age, and of puerperal fever and puerperal pyrexia cases, can be carried out by the district nurses. Beds are available at the Isolation Hospital for cases requiring hospital treatment. During the year the services of the

district nurses were asked for in 41 cases of measles, 11 cases of whooping cough, 10 cases of ophthalmia neonatorum, 6 cases of pemphigus and 10 maternity cases ; 13 cases of measles, 5 cases of whooping cough, 1 case of ophthalmia neonatorum and 18 cases of puerperal fever or puerperal pyrexia were admitted to the Isolation Hospital.

INSPECTION AND SUPERVISION OF MIDWIVES.—

There were 33 midwives on the register as practising in the borough during the year and the qualifications of these midwives were as follows :—

Holding the Certificate of the Central Midwives' Board	32
Having other recognised certificates	1

In addition to the above, 9 midwives are employed at the Council's Maternity and Child Welfare Hospital and 5 midwives are employed in the Maternity Block of the St. Helens Hospital. The matrons of both these institutions are also qualified midwives.

Inspections of midwives were carried out on 62 occasions by medical officers, and the Inspector of Midwives and the health visitors paid 88 routine and 46 special visits for purposes of inspection and supervision. In 19 instances it was considered necessary to suspend a midwife from practice for 24 hours after contact with an infectious case to allow of the disinfection of herself and her appliances.

During the year the private midwives attended 1,285 cases as midwives and were in attendance on 91 cases as maternity nurses.

In their capacity as midwives they found it necessary to call medical practitioners to their assistance on 434 occasions. The reasons for sending and the number of occasions in which medical assistance was required were as follows :—

Number of cases attended by private midwives 1285

Number and percentage in which medical assistance was obtained	434	(33.7%)
--	-----	---------

Reasons for medical assistance :—

(a) For abortions and premature labours	41	(3.2 %)
(b) For ante-natal illnesses	29	(2.3 %)
(c) For difficult labour	171	(13.3 %)
(d) For suturing the perineum, expelling the placenta, excessive haemorrhage, etc.	101	(7.8 %)
(e) For post-natal illnesses	44	(3.4 %)
(f) For the child	48	(3.7 %)

During the financial year 1935-36 £546/19/0d. was paid to medical practitioners for these services, and £214/9/1d. was re-charged to the patients.

PROVISION OF MIDWIVES.—Though no district midwives are directly employed or subsidised by the public health authority, the whole or part of the fee of the midwife in attendance is paid in exceptional cases where the patient is unable to pay by reason of poverty. During 1935 payments were made in 90 instances and the amount expended was £67/6/0d.

HEALTH VISITING.—The following statement shows the visits paid by health visitors during the year.

To expectant mothers :—

(a) First visits	438
(b) Subsequent visits	348

To infants under one year :—

(a) First visits	2,109
(b) Subsequent visits	10,384

To children, aged one to five years	17,250
-------------------------------------	--------

Total Visits	30,529
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MATERNITY AND NURSING HOMES.—There are three maternity homes registered in St. Helens under the Nursing Homes Registration Act, 1927. These have been periodically inspected and found to be satisfactory.

During the year 74 maternity cases were delivered in these homes.

Exemption from the provisions of the Act was granted to the St. Helens Hospital and the Providence Free Hospital. In the maternity block of the St. Helens Hospital 424 cases were delivered.

CHILD WELFARE CLINICS.—Child Welfare clinics for children under 5 years of age are conducted at eight sessions weekly at six centres. The attendances at the various maternity and child welfare clinics during 1935 are shown in Table 28.

In May, 1935 one of the child welfare clinics was transferred from the Town Hall to the Girls' Institute at Parr, so that there is now both a child welfare clinic and an ante-natal clinic in Parr. This arrangement has proved much more convenient for the mothers living in the Parr and Derbyshire Hill districts.

In October, 1935, arrangements were made whereby the last sessions each month of the two child welfare clinics at Albion Street were reserved for toddlers, i.e., children between the ages of 2 and 5 years. The intention is that the toddlers should attend on these special days for periodic medical inspection and thus ensure as far as possible that they commence their school life in as physically fit condition as possible. Special sessions for toddlers were held on six occasions at Albion Street Centre during 1935, and 79 toddlers made 93 attendances at these sessions.

During the current year arrangements for these special sessions for toddlers have also been made at the Town Hall and Parr Clinics and are working very satisfactorily. If the supervision of toddlers is to be a success, however, it will be necessary to have in the near future additional sessions for toddlers only. There are in St. Helens approximately 6,000 toddlers and only a very small proportion are attending nursery classes and coming under medical supervision there. If their supervision is to be satisfactory, more time must be devoted to them than can be spared from infant welfare sessions.

TEST-FEEDING CLINIC.—This clinic was commenced in July, 1935, with the object of encouraging mothers to breastfeed and to prevent, if possible, mothers weaning their babies whenever the first difficulty of natural feeding arises.

The clinic is held on two sessions weekly at the Albion Street Centre, and is conducted by the Superintendent Health Visitor under the supervision of the Medical Officer in charge of Maternity and Child Welfare. Nursing mothers experiencing difficulty in breast feeding are referred to this clinic from the infant welfare clinics and post natal clinics, and by private medical practitioners.

At the Test Feeding Clinic the process of feeding is observed and faults corrected. The infant is weighed before and after feeding to ascertain whether the child is obtaining a sufficiency or not, and, if necessary, a sample of the milk is analysed.

During the period July to December, 45 mothers attended this clinic. In 24 breast feeding was continued, 18 were given instructions regarding supplementary feeds and 5 were advised to wean. 8 of the mothers, however, persisted in weaning before it was considered advisable to do so.

ANTE-NATAL CLINICS.—Special ante-natal clinics are held six times weekly at five centres. There was a substantial increase in the number of expectant mothers attending these clinics during 1935, the number attending being 1,188 in 1935, as compared with 1,008 in 1934. Expressed as a percentage of the total notified (live and still) births, in 50% of the births the mother had attended one or other of these special clinics. It is interesting to note that of those attending during 1935, 594 had attended during previous pregnancies.

Among the 1,188 mothers attending during 1935, abnormalities or diseases requiring correction or treatment were discovered in 165 cases (13.9%).

TABLE 28.

Attendances at Maternity and Child Welfare Clinics.

	1934	1935
Child Welfare Clinics.		
No. of children who attended for the first time during the year and who, on the date of their first attendance, were :—		
(i) under 1 year of age	1380	1351
(ii) between the ages of 1 and 5 years	554	633
Percentage of notified births represented by the number of children who on the date of their first attendance were under 1 year of age	63.86	60.0
Number who attended and at the end of the year were—		
(i) under 1 year of age	1082	1174
(ii) between the ages of 1 and 5 years	1471	1775
No. of attendances by children—		
(i) under 1 year of age	26899	26710
(ii) between the ages of 1 and 5 years	3199	4173
*Test-feeding Clinic.		
No. of nursing mothers attending	—	45
No. of attendances	—	104
Ante-natal Clinics.		
No. of expectant mothers attending	1008	1188
No. of attendances by expectant mothers	4672	5572
Percentage of total notified births (live and still) represented by the number of expectant mothers who attended either the Maternity and Child Welfare Centres or the Ante-natal Clinics	44.2	50.0
Gynaecological and Post-natal Clinic.		
No. of Mothers attending	182	171
No. of attendances	522	376
Sunlight Clinic.		
No. of Children attending	127	143
No. of attendances	1988	2256

* Clinic opened July, 1935.

GYNAECOLOGICAL AND POST-NATAL CLINIC.—

This Clinic serves a threetold purpose : (a) a centre where post-natal cases may go for examination and advice ; (b) a clinic where women suffering from any disease or disability associated with childbirth may obtain advice and treatment ; and (c) a centre where birth control advice may be given when further pregnancies would be detrimental to the mother's health.

During 1935 a total of 171 patients attended at this clinic. The following classification shows the reasons for attendance :—

Displacements of Uterus	.....	.....	.....	33
Uterine Fibroids	.....	.....	.....	1
Infantile Uterus	.....	.....	.....	1
Leucorrhoea	.....	.....	.....	9
Menorrhagia	.....	.....	.....	6
Menopausal symptoms	.....	.....	.....	5
Venereal Disease	.....	.....	.....	4
Phlegmasia	.....	.....	.....	2
Umbilical hernia	.....	.....	.....	1
Otitis Media	.....	.....	.....	1
Cardiac Disease	.....	.....	.....	1
Debility	.....	.....	.....	24
Suspected Pregnancy	.....	.....	.....	10
For examination because of sterility	.....	.....	.....	15
For measurement for abdominal belts	.....	.....	.....	2
Post-natal cases	.....	.....	.....	56
				— —
				171
				— —

Of the 56 post-natal cases, 29 required treatment—15 for anaemia, 5 for sub-involution of the uterus, 3 for slight retro-version of the uterus, 2 for persistent albuminuria, 2 for leucorrhoea, 1 for debility and 1 for rheumatism.

Of the remaining 115 patients 6 were referred for operation at general hospitals, and 20 were referred to their own doctors for

treatment. The venereal disease cases were referred to the Venereal Diseases Centre for treatment and cases found to be pregnant to the ante-natal clinic.

Advice on birth control methods was given to 5 patients, four of whom had severe cardiac disease and one who suffered from nephritis.

The services of the Council's Consultant Gynaecologist are available for patients attending this Clinic and during 1935, 6 patients were referred to him.

SUNLIGHT CLINIC.—Two sessions are held weekly at the Artificial Sunlight Clinic, and during 1935, 143 children made 2,256 attendances for treatment. There is no doubt this clinic has been of great benefit in helping the weakly and the rachitic child and is of the greatest assistance as an adjunct to other forms of treatment.

The following are the conditions for which children received treatment during the year :—

Rickets	60
Debility and malnutrition	37
Enlarged Cervical Glands	4
Marasmus	21
Anaemia	5
Bronchitis	5
Pyloric Spasm	1
Tubercular Abdominal Glands	1
Spastic Diplegia Erb's Paralysis	1
Debility following Whooping Cough.....	5
Post-pneumonic debility	2
Mongol	1
	<hr/>
	143
	<hr/>

HOSPITAL ACCOMMODATION.—The Council maintain 15 beds for maternity cases and 22 cots for ailing and debilitated children at their Maternity and Child Welfare Hospital, Cowley Hill. Work commenced towards the end of the year on the alterations and adaptations to convert the premises adjoining “The Gables” for use as a children’s annexe. When this is complete the accommodation will be increased to 20 maternity beds and 32 cots for children.

During the past year the popularity amongst mothers of going into a hospital or nursing home for the confinement has shown no abatement. Of the total (live and still) births registered in St. Helens during 1935, 19 per cent. occurred in the Council’s Maternity Hospital, 18 per cent. in the St. Helens Hospital, 3 per cent. in midwives’ private nursing homes, and 60 per cent. in the patients’ own homes. This popularity has increased remarkably in recent years. Of the total births registered in 1931, 26 per cent. occurred in hospitals or nursing homes. In 1935 this percentage had increased to 40. What the future tendency will be is extremely difficult to predict. The new Midwives’ Bill, when passed, will mean the taking over by the Council of practically all the district midwifery. This will mean a better linking up between the midwives working on the districts and the hospital services, and there may therefore be more selection in cases admitted to hospital. Furthermore, housing conditions are improving—if slowly—in the Borough. These two factors may lead, in the future, to more mothers being confined at home. On the other hand, there is no doubt that even in the normal case the average working-class mother benefits greatly by entering a hospital or nursing home for her confinement. Apart from the fact that in a hospital or nursing home the confinement can be made safer, she benefits enormously from the rest from constant home worries and from the regular and proper feeding. That mothers themselves realise this is borne out by the large number who return to the Council’s Maternity Hospital for subsequent confinements.

On the maternity side of the Council’s hospital, 520 cases were admitted during the year, which, with 15 cases remaining in

the hospital from the previous year, brought the total number of cases dealt with during 1935 to 535. The average duration of stay of all cases was 11.9 days.

The number of cases delivered during the year was 456, and among them the following abnormalities were dealt with :—

Induction of labour	.....	.....	.....	.....	.....	22
Albuminuria	.....	.....	.....	.....	.....	22
Eclampsia	.....	.....	.....	.....	.....	2
Breech delivery	.....	.....	.....	.....	.....	19
Placenta Praevia	.....	.....	.....	.....	.....	13
Caesarian Section	.....	.....	.....	.....	.....	10
Face presentation	.....	.....	.....	.....	.....	3
Shoulder presentation	.....	.....	.....	.....	.....	2
Prolapsed cord	.....	.....	.....	.....	.....	2
Twin delivery	.....	.....	.....	.....	.....	6
Triplet delivery	.....	.....	.....	.....	.....	1
Forceps delivery	.....	.....	.....	.....	.....	2
Abortion.....	.....	.....	.....	.....	.....	3
Adherent placenta.....	.....	.....	.....	.....	.....	1
Episiotomy	.....	.....	.....	.....	.....	4
Anencephaly	.....	.....	.....	.....	.....	3
Cardiac Disease	.....	.....	.....	.....	.....	8
Phthisis	.....	.....	.....	.....	.....	1
						123

In addition to cases admitted for delivery, 45 ante-natal cases were admitted for rest or treatment for the following reasons :— Albuminuria 20, Cardiac Disease 8, Debility 12, persistent vomiting 4, and Phthisis 1.

There was 1 maternal death in the hospital during the year, the cause of death being Placenta Praevia and Eclampsia.

Infant deaths numbered 35, of which 24 were still born. The causes of the other 11 infant deaths were :

Prematurity due to :—

Albuminuria in mother	.....	.....	.....	.....	3
Toxaemia of pregnancy	.....	.....	.....	.....	1
Placenta Praevia	.....	.....	.....	.....	2
Cardiac Disease in mother	.....	.....	.....	.....	1
Intra Cranial Haemorrhage	.....	.....	.....	.....	2
Haemorrhagic Disease of the new-born	.....	.....	.....	.....	1
Septicaemia due to congenital malformation of upper jaw	.....	.....	.....	.....	1
					———
					11
					———

On the children’s side of the hospital 93 cases were dealt with during the year, including 19 cases which were remaining in hospital on the 1st January. Table 30 shows the reasons for admission.

Table 30.

Table showing the reasons for admission of Children to the St. Helens Maternity and Child Welfare Hospital during 1935.

Reason for Admission	Number
Rickets	10
Bronchitis	4
Marasmus	16
Debility	25
Malnutrition	3
Prematurity	2
Tubercular peritonitis	1
Gastro enteritis	5
Pylorospasm	1
Broncho pneumonia	1
Post pneumonic debility	2
Spina Bifida	1
Multiple Abscesses	2
Breast Abscess	1
	74

CONSULTANT SERVICES.—The services of a Consultant Obstetrician and Gynaecologist are available for any cases in which special difficulty is experienced. He acts as Consultant Surgeon to the Council's Maternity Hospital and to all the Clinics and, under the Council's arrangements for the treatment of puerperal fever and puerperal pyrexia, his services are available to medical practitioners requiring specialist opinion in such cases.

The services of the Council's other consultant officers, e.g., the Ophthalmic Surgeon, the Throat and Nose Surgeon, and the Orthopaedic Surgeon, are also available and employed when required for any cases under the Maternity and Child Welfare Scheme.

MILK FOR MOTHERS AND INFANTS.—At all the clinics and centres full cream dried milk and chocolate milk are on sale at cost price, or are available at less than cost price for necessitous cases. In exceptional cases orders on local tradesmen are given for the supply of meat and for eggs. Cases in receipt of relief from the Public Assistance Committee or the Unemployment Assistance Board are, when so requiring it, recommended to these authorities for the supply of extra nourishment.

During the year approximately 416 cwts. of milk or chocolate-milk were disposed of, and, of this, 83 lbs. were issued free and 45,048 lbs. at less than cost price.

Cod Liver Oil Emulsion, Malt and Oil, and Virol are also provided at the centres at cost price or free in suitable cases.

STERILE MATERNITY OUTFITS.—Following the reduction, in January, 1935, of the cost, at which these outfits are available from 3/- to 1/6, more use was made of this service during 1935 than in previous years. It is surprising, however, that the demand for them is not greater. Only 162 outfits were purchased during the year despite the fact that they could be bought by instalments. The greater use of these outfits, containing, as they do, the necessary swabs, pads &c. in a clean and sterile condition would assist materially in the protection of the mother against puerperal infection.

MATERNITY BAGS.—Maternity bags, containing sheets, nightgowns, baby clothing &c., are also available on loan in cases of necessity or where the mother has not been able to make any preparations for her confinement. Bags were loaned to 5 cases during the year.

MINOR AILMENTS AND DENTAL DEFECTS.—During the year, 11 children received treatment for minor ailments, and 286 mothers and 158 children received dental treatment at the school clinic. Mothers in need of dentures are supplied with these at cost price. Arrangements have also been made for the supply of spectacles to toddlers in necessitous cases when these are required for the treatment of squint.

CRIPPLED CHILDREN.—A complete record of the work of the Orthopaedic Clinic is given in Table 31 in the Orthopaedic section of the Report.

From that Table it will be seen that under the Maternity and Child Welfare Service 147 crippled children under 5 years of age were dealt with. This involved 229 attendances to see the orthopaedic surgeon, 2016 attendances for intermediate treatment, and 98 home visits by the nurse for purposes of supervision. 11 cases were admitted to orthopaedic hospitals for operation or other surgical treatment and 6 cases were treated at the Maternity and Child Welfare Hospital.

INFANT LIFE PROTECTION.—Particulars are given in the following statement of the cases dealt with during the year under the Children and Young Persons Acts.

Number of persons on the Register who were receiving children for reward at 31/12/1935	10
---	----

Number of children—

(a) On the Register at 1/1/1935	11
(b) Admitted to the Register during the year	2

(c) Removed from the Register during the year—		
(i)	Left the Borough	—
(ii)	Legally adopted	1
(iii)	Returned to relatives	2
(iv)	Over age	—
		— 3
(d)	Who died during the year	—
(e)	On the Register at 31/12/1935	10

The children were inspected regularly throughout the year by the health visitors, who are also infant protection visitors under the Acts, and all were found to be well cared for and living under satisfactory conditions.

IX. ORTHOPAEDICS.

A record of the work carried out under the Orthopaedic Scheme during 1935 is given in Table 31, and Table 31(a) shows the cases treated during the year classified according to their defects.

The Orthopaedic Scheme has now been in operation in St. Helens for the past ten years. Whilst the lines upon which it has run have altered very little since its inception, the type of work has undergone a slow but steady change. In the earlier years, the major portion of the work consisted in the treatment of patients with deformities due to definite pathological changes present in the skeletal or muscular systems. Of this type of case rickets and infantile paralysis provided outstanding examples. Apart from the small

epidemic of anterior poliomyelitis in 1933, however, there has been a steady tendency for this type of case to diminish. At the same time there has been a material increase in the utilisation of existing facilities for the treatment of acquired postural defects such as flat feet and round shoulders. Though this work can well be defined as preventive, it is much more laborious, and entails a great deal of monotonous routine over a long period, from which any element of the dramatic is totally lacking. The further development of physical training in the schools should do much to eliminate such defects.

To meet the increased amount of intermediate treatment necessary, a further clinic was inaugurated during the year in the Parr district. There are now four district clinics in addition to the Albion Street Centre. The Orthopaedic Nurse also holds sessions at the Hamblett Open Air School and Eccleston Hall Sanatorium once weekly.

In-patient treatment for younger children is provided at the Royal Liverpool Children's Hospital and its branches at Heswall and Thingwall, and for very young children at the Maternity and Child Welfare Hospital at Cowley Hill. Older children are treated at the Royal Southern Hospital, Liverpool. Tuberculosis of bones and joints is treated at Leasowe Open-Air Hospital for children or at Eccleston Hall Sanatorium. At all times, no matter in which of these institutions patients may be, they are under the immediate control of the Council's Orthopaedic Surgeon, thus securing continuity of treatment throughout. The importance of this cannot be too greatly stressed.

It is impossible to conclude this section of the Report without appreciation of the work done by the St. Helens Crippled and Invalid Children's Aid Society. This Society, co-operating closely with the Orthopaedic Scheme, is a very active and efficient instrument in securing adequate after-care for the crippled child. The value of its work is inestimable in following up cases, helping with the provision

of splints and extra nourishment, arranging periods of convalescence at holiday homes, and finally in supervising the education and training of the cripple so that he can take his place as an asset and not a liability to the community.

Table 31.

Record of work under Orthopaedic Scheme during the year 1935.

	Cases of Tuberculosis	Maternity and Child Welfare Cases	Non- tubercular School Children
Number of cases on the Register, 1st January, 1935	43	81	273
Number of new cases seen during 1935	5	66	97
Number of old cases seen during 1935	43	81	273
Number who attended for consultation only	—	1	3
Number discharged cured or improved	3	19	42
Number discharged showing no material improvement	—	1	1
Number ceased to attend, over age, etc.	3	15	56
Cases transferred to Education Account	4	21	—
Cases transferred to Tuberculosis Account	—	1	3
Number of cases remaining under treatment at end of 1935	38	89	265
Attendances to see Orthopaedic Surgeon	71	229	471
Attendances for intermediate treatment	718	2016	6157
Visits to Homes by Orthopaedic Nurse	475	98	182
Cases treated in Royal Liverpool Children's Hospital : Myrtle Street	1	7	19
Heswall	3	3	12
Cases treated in Leasowe Open-Air Hospital for Children	10	—	—
Cases treated in Royal Southern Hospital	1	1	4
Cases treated in Maternity and Child Welfare Hospital	—	6	—
Cases treated in Eccleston Hall Sanatorium	6	—	—
Total number of days of Institutional Treatment	4446	1064	1420

Table 31(a).

Defects treated under Orthopaedic Scheme during 1935.

Defect	Tuberculosis	Maternity and Child Welfare Cases	Non-tubercular School Children
Infantile Paralysis	—	20	67
Other forms of Paralysis	—	14	45
Rickets	—	45	40
Congenital deformities	—	22	53
Acquired Foot deformities	—	34	84
Traumatism	—	4	18
Arthritis	—	1	8
Postural Defects	—	2	37
Miscellaneous	—	5	18
Tuberculosis :			
(a) Spine	19	—	—
(b) Hip	10	—	—
(c) Knee.....	9	—	—
(d) Ankle	5	—	—
(e) Others	5	—	—
Total	48	147	370

X.—WELFARE OF THE BLIND.

There were 217 Blind Persons on the Blind Register for St. Helens on the 1st January, 1935, and this number decreased by 3 to 214 during the year. The following is an analysis of the cases on the register at the 31st December, 1935.

Age distribution :—

Age	0—4	years	—
	5—15	„	.....	.....	.....	11
	16—19	„	.....	.....	.....	11
	20—49	„	.....	.....	.....	62
	50—69	„	.....	.....	.....	63
	70—	„	.....	.....	.....	67
						—
		Total	.....	.....	.....	214

Educational and occupational distribution :—

Infant	.....	.....	.....	.....	.....	.....	—
Education	At School	.....	.....	.....	.....	.....	9
	Not at school	.....	.....	.....	.....	.....	2
Employment—Employed (Workshops or Home Workers Scheme)	.....	.....	.....	.....	.....	.....	25
	Employed (Working on own account)	.....	.....	.....	.....	.....	5
	Under Training	.....	.....	.....	.....	.....	9
	Not training but trainable	.....	.....	.....	.....	.....	1
	Unemployable	.....	.....	.....	.....	.....	163

All provision for the care and welfare of the local blind—with the exception of that of blind children under two years of age, and the education of children of school age and vocational training—is undertaken on behalf of the Corporation by the St. Helens and District Society for the Welfare of the Blind.

The treatment of persons suffering from disease of, or injury to, the eye, and the provision of suitable glasses as a preventative of blindness is undertaken by the Council under Section 66 of the Public Health Act, 1925.

XI.—POOR LAW MEDICAL RELIEF.

The arrangements for institutional treatment remain as before ; the Council having renewed, for a further period of five years, their agreement with the Lancashire County Council for the treatment of cases at the Whiston Infirmary. Table 32 shows the number of persons in receipt of institutional relief on medical grounds on the 1st January, 1936, and also the number of rate-aided persons in mental hospitals.

Table 32.

Establishments in which persons were relieved.	Men	Women	Children between 3 and 16 years of age	Infants under 3 years of age	Total
(A). <i>In Poor Law Establishments :—</i>					
Whiston Infirmary :					
(a) Sick wards	65	32	14	9	120
(b) Persons suffering from mental infirmity and certified under the Lunacy Acts or the Mental De- ficiency Acts	48	57	—	—	105
(B). <i>In Establishments not administered under the Poor Law Acts :—</i>					
(a) Establishments for persons suffering from mental infirmity, excluding persons maintained under the Lunacy and Mental Treatment Acts, 1890 to 1930, in Mental Hospitals :—					
Royal Albert Institution	2	—	—	—	2
(b) Other Establishments for the Sick—					
Maghull Home for Epileptics	2	5	—	—	7
St. John's Institution for Deaf and Dumb, Boston Spa	—	1	—	—	1
David Lewis Epileptic Colony, Manchester.....	1	—	—	—	1
Devonshire Hospital, Buxton	—	1	—	—	1
Chalfont Epileptic Colony, Bucks.	—	1	—	—	1
St. Luke's Hospital, Manchester	1	—	—	—	1
(C). <i>In Mental Hospitals administered under the Lunacy and Mental Treatment Acts :—</i>					
Rate aided persons	135	118	—	—	253
TOTALS	254	215	14	9	492

During the year the arrangements for outdoor medical relief were reviewed, and, owing to the great increase in the amount of medical out-relief in recent years, it was decided to divide the Borough into five medical relief districts instead of three as formerly. The new districts are :—

- No. 1 District—
North Windle Ward
South Windle Ward

- No. 2 District—
North Eccleston Ward
South Eccleston Ward

No. 3 District—

Central Ward

Hardshaw Ward

No. 4 District—

West Sutton Ward

That part of East Sutton Ward which lies to the South and West of the St. Helens and Widnes Railway line and adjoins the West Sutton Ward.

No. 5 District—

That part of East Sutton Ward which lies to the North-east and East of the St. Helens and Widnes Railway line and adjoins Parr Ward.

Parr Ward.

With the alteration in the medical relief districts, opportunity was also taken to alter the arrangements for the supply of medicines. Previously these had been supplied by the District Medical Officers themselves, but arrangements have now been made whereby the dispensing is carried out by local chemists in the same way as under the National Health Insurance Scheme. This is an undoubted advantage as it allows District Medical Officers to prescribe, when necessary, special drugs not usually kept in a doctor's dispensary.

During the 12 months ending 31st March, 1936 (the first complete year of the new arrangements) 3,720 medical orders were issued and there was an average of 307 persons on the permanent medical relief list. During the same period 15,252 prescriptions were completed by the chemists in connection with the treatment of these cases.

The arrangements whereby cases requiring dental treatment are treated at the Council's Dental Clinic were continued ; the work being carried out at a special evening session held weekly. 410 cases were treated during the year at that Clinic and to 70 of these, dentures were also supplied.

Cases with eye diseases or defects are treated by the Ophthalmic Surgeon at either the St. Helens Hospital or the Providence Hospital.

**XII.—LIST OF ADOPTIVE AND LOCAL ACTS, BYELAWS,
AND LOCAL REGULATIONS AND ORDERS
relating to the public health, in force in the district.**

ADOPTIVE ACTS.

The Infectious Disease (Notification) Act, 1889, applied to :

- (1) Ophthalmia Neonatorum, by Order of the Local Government Board, which came into force on the 7th April, 1910.
- (2) Acute Poliomyelitis and Cerebro Spinal Fever, by Order of the Local Government Board, which came into force on the 19th February, 1912.

The Infectious Disease (Prevention) Act, 1890. Adopted 7th January, 1891.

The Public Health Acts Amendment Act, 1890. Parts II and III adopted 1st April, 1891. Part IV adopted 1st July, 1923. Part V adopted 24th October, 1894.

Public Health Acts Amendment Act, 1907, Sections 78, 79, 80, 81, 85, 88, 89 and 90, put in force 1st January, 1909. Sections 19, 25, 26, 27, 29, 32, 33, 34, 35, 36, 46, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 66, 67, 68, 93, and 95, and Part V, put in force 23rd August, 1909.

The Public Health Act, 1925, Part II, Sections 13, 14, 15, 16, 20, 23, 25, 26, 27, 28, 30, 31, 32, and 35 ; Parts III, IV, and V, adopted 7th December, 1927, put in force on 1st February, 1928.

LOCAL ACTS with Sanitary Clauses.

The St. Helens Improvement Act, 1869.

The St. Helens Corporation Act, 1893.

The St. Helens Corporation Act, 1898.

The St. Helens Corporation Act, 1911.

The St. Helens Corporation Act, 1921.

The St. Helens Corporation Act, 1933.

ADAPTATION OF LOCAL ACTS.

The Borough of St. Helens (Adaptation of Local Acts) Order, 1930, made by the Minister of Health, for bringing certain provisions of the local Acts into conformity with the provisions of the Public Health Act, 1925.

The Ministry of Health Provisional Orders Confirmation (St. Helens and York) Act, 1931 ; confirming the St. Helens Order, 1931 as to Tuberculosis.

The Ministry of Health Provisional Orders Confirmation (No. 1) Act, 1928, repealing and altering certain sections of the St. Helens Improvement Act, 1869, and the St. Helens Corporation Acts, 1893, 1898, 1911, and 1921 with reference to New Streets and Buildings.

BYELAWS.

Byelaws 1 to 8 (both inclusive) of the Byelaws with respect to certain Offences and as to the Prevention of Nuisances arising from filth and the Keeping of Animals, etc.

Byelaws with respect to Nuisances made by the Council on the 1st October, 1930.

Byelaws as to Slaughterhouses, made by the Council on the 5th February, 1930.

Byelaws with respect to New Streets and Buildings in the Borough of St. Helens, made by the Council on the 5th October, 1927.

Byelaws with respect to the Drainage of Existing Buildings in the Borough of St. Helens made by the Council on 7th December, 1927.

Byelaws with respect to Tents, Vans, Sheds and similar Structures used for human habitation, made by the Council on the 28th July, 1926.

Byelaws with respect to Common Lodging Houses, made by the Council on the 2nd May, 1894.

Byelaws with respect to Houses let in Lodgings, made by the Council on the 2nd May, 1894.

Byelaws with respect to Female Domestic Servants' Registries, made by the Council on the 1st December, 1909.

Byelaws with respect to the Supply of Water, made by the Council on the 6th June, 1900.

Byelaws with respect to Cisterns, Waterclosets and Urinals, made by the Council on the 1st February, 1922.

Byelaws as to Spitting, made on the 2nd August, 1911.

REGULATIONS.

Regulations as to Public Abattoir and Cold Air Stores, made by the Council on the 2nd May, 1906.

The Borough of St. Helens (Notification of Measles, German Measles and Whooping Cough) Regulations, 1915, made by the Minister of Health on the 22nd June, 1915.

ORDERS—SHOP ACTS.

General Weekly Half-Holiday Order, made on the 7th August, 1912.

Weekly Half-Holiday Extension Order (Butchers and Chemists) made on the 4th December, 1912.

Closing Order (Motor, Cycle and Aircraft dealers) confirmed by the Home Secretary on the 30th January, 1913.

Closing Order (Tailors, etc. Shops) confirmed by the Home Secretary on the 10th December, 1915.

XIII.—INSPECTION AND SUPERVISION OF FOOD.

MEAT AND OTHER FOODS.—There is a municipal abattoir with cold stores attached. The inspection and supervision of all meat at the abattoir is carried out by the Abattoir Superintendent who is a qualified Meat Inspector.

The butchers using the abattoir employ their own slaughtermen and these are now licensed yearly under the Slaughter of Animals Act, 1933. During the year licences were renewed to 28 slaughtermen employed at the abattoir and two additional licences were granted. All animals (including sheep) are stunned by captive bolt pistols before slaughter.

At the end of the year the use of the Abattoir as a Live-Weight Certification Centre under the Cattle (Emergency Provisions) Act, 1934, was discontinued owing to its being little used for that purpose.

In addition to the Public Abattoir there is one private slaughter house in the borough. This is licensed for the slaughter of pigs only and the licence comes up for review yearly. Licences under the Slaughter of Animals Act, 1933, were renewed to three slaughtermen employed at this slaughterhouse and one additional licence was granted. During the year 444 visits for inspection purposes were made to this slaughterhouse and no infringements of the Byelaws with respect to Slaughterhouses or of the Public Health (Meat) Regulations, 1924, were found.

Under Section 135 of the St. Helens Corporation Act, 1933, it is necessary for any person (other than a shop keeper) who sells meat or meat food products from a vehicle, basket or barrow, to hold a certificate from the Corporation approving the accommodation used by him for storage purposes. Three certificates of approval were granted during the year and in two instances legal proceedings were taken against meat hawkers for selling meat from vehicles without holding certificates. Fines of 10/- were inflicted in each case.

Table 33 shows the number of animals slaughtered in St. Helens and the approximate weight, in pounds, of meat found diseased.

Table 33.

Number of Animals slaughtered and amount of diseased meat condemned during the year, 1935.

						PRIVATE			
ABATTOIR.						SLAUGHTERHOUSE.			
		Number of Animals Slaugh- tered.	No. of Animals found diseased		Weight in lbs. of Meat Con- demned	Number of Animals Slaugh- tered.	No. of Animals found diseased		Weight in lbs. of Meat Con- demned
			Tuber- culosis	Other diseases.			Tuber- culosis	Other diseases.	
Beasts	.....	3943	376	1144	79323	—	—	—	—
Calves	.....	210	3	4	428	—	—	—	—
Sheep	.....	1587	—	16	149	—	—	—	—
Pigs	.....	5394	198	450	8495	4604	535	212	10748½

The inspection and supervision of other foodstuffs in the borough, and of the premises in which it is prepared or sold, is undertaken by a specialist Food Inspector.

At the end of the year 188 premises were registered under Section 127 of the St. Helens Corporation Act, 1933, for the preparation or manufacture of potted, pressed, pickled, or preserved meat, fish or other food intended for the purpose of sale. Of these 159 were fried fish shops and 29 were used for the preparation or manufacture of cooked meats.

During 1935, 3,785 visits were made by Inspectors to shops, stalls and other places where food is prepared or stored, as compared with 4,338 visits during 1934. The following is a brief summary of the work covered by these visits. Further details are given in the appropriate sections of the Report :—

Premises.	Visits	No. of offences against Acts, Orders, &c.	No. of nuisances or defects found	No. of nuisances or defects remedied after service of notice
Private Slaughter houses	444	—	—	—
Fried Fish shops	264	—	—	—
Fishmongers and Greengrocers	743	36	—	—
Butchers shops	1089	19	2	2
Ice Cream shops	267	—	1	1
Bakehouses	149	—	6	6
Tripe Boilers	101	—	—	—
Food Preparing and Storing Places	728	4	2	2

The following are the total quantities of various classes of food-stuffs which were condemned during the year owing to being diseased or unsound :—

Meat	99,143½ lbs.
Fish	3,037 „
Poultry, Game and Rabbits.....	105 „

Public Health (Meat) Regulations, 1924.—Fifteen infringements of the Public Health (Meat) Regulations, 1924, were found during the year as compared with twenty-nine during 1934. The offences consisted of :—

	<i>No. of Offences</i>
1. Premises not kept in a cleanly condition	2
2. Walls and/or ceilings requiring cleansing and whitewashing	4
3. Unsuitable receptacle for the storage of trimmings and refuse	7
4. Room not adequately ventilated	1
5. Failure to protect meat from contamination by dust	1

Legal proceedings were taken in respect of the last-mentioned offence but the case was dismissed on payment of costs. In the remaining instances the unsatisfactory conditions were remedied.

Agricultural Produce (Grading and Marking) Act, 1928.—More use is now being made in St. Helens than formerly of the special trade designations allowed by the above Act defining the quality of agricultural produce, but there is still considerable scope for improvement in this direction.

There are no premises registered for the cold or chemical storage of eggs.

Merchandise Marks Act, 1926.—The Orders which have so far been made under the Merchandise Marks Act, 1926, in regard to foodstuffs are :—

Order.	Relating to
The Merchandise Marks (Imported Goods) No. 3 Order, 1928	Honey. Fresh Apples.
The Merchandise Marks (Imported Goods) No. 5 Order, 1928	Currants, Sultanas, Raisins. Eggs in Shell. Dried Eggs. Oat Products.
The Merchandise Marks (Imported Goods) No. 4 Order, 1929	Raw Tomatoes.
The Merchandise Marks (Imported Goods) No. 5 Order, 1930	Malt products.

Order.	Relating to
The Merchandise Marks (Imported Goods) No. 8 Order, 1931	Imported frozen or chilled salmon or sea trout.
The Merchandise Marks (Imported Goods) No. 1 Order, 1932	Butter.
The Merchandise Marks (Imported Goods) No. 3 Order, 1934	Bacon and Ham.
The Merchandise Marks (Imported Goods) No. 5 Order, 1934	Dead Poultry.
The Merchandise Marks (Imported Goods) No. 7 Order, 1934	Meat.

These Orders require that any classes of foodstuffs to which they relate shall on importation, on exposure for sale, and when sold in quantities exceeding 14 lbs. in weight, be clearly marked with an indication of origin.

1,632 visits were made during the year for the purpose of ensuring that the requirements of these Orders were being complied with. 52 verbal warnings were given by the Inspecting Officer for minor infringements and in two instances the offenders were warned by the Committee.

Legal proceedings were instituted against one fish-dealer under Section 2 of the Merchandise Marks Act, 1887, for selling perch as salmon trout, and a fine of 10/- was imposed.

MILK SUPPLY.—At the close of the year there were registered under the Milk and Dairies (Amendment) Act, 1922, and the Milk and Dairies Order, 1926 :—

- 8 persons as cowkeepers and wholesale and retail purveyors of milk ;
- 3 persons as cowkeepers and wholesale purveyors of milk ;
- 10 persons as cowkeepers and retail purveyors of milk ;
- 389 persons as purveyors of milk ; and
- 84 premises as cowsheds or dairies.

Approximately 317 cows are kept for dairy purposes within the borough, and these were regularly inspected by the veterinary inspector.

Milk and Dairies (Consolidation) Act, 1915.—No infringements of this Act were found during the year.

Milk and Dairies Order, 1926.—During the year a total of 711 visits were paid by the Sanitary Inspectors to the dairies and cowsheds in the Borough. In addition to these visits all dairy cattle are inspected quarterly and as occasion arises by the Veterinary Inspector and advisory visits are also paid to farms by the agricultural staff of the Lancashire County Council. It will be seen, therefore, that adequate supervision of these premises is being maintained.

As a result of previous educational activities, milk producers have themselves set high standards in these respects and the policy of the Health Committee in recent years has amply demonstrated the superiority of a co-operative policy over a coercive one.

Serious infringements of the Order are now few, but it was necessary to institute legal proceedings in two instances in respect of the following offences :—

- 1.—Failure to cause churns to be thoroughly cleansed before leaving the custody and control of the dairyman.

Fined £1 0 0

- 2.—Failure to cause cowshed floor to be maintained in a clean condition.

Fined £2 0 0

Milk (Special Designations) Order, 1923.—The following licences were granted during the year under the Milk (Special Designations) Order, 1923 :—

Producer's Licence to sell milk as Grade A	.....	8
Producer's Licence to sell milk as " Certified "	.....	1
Supplementary Licence to sell milk as " Certified "		1
Pasteuriser's Licence to sell milk as		
" Pasteurised "	.....	2

With the large number of licences for the production of Grade A milk now being granted by licensing authorities throughout the country, consequent upon the coming into operation of the Accredited

Milk Scheme of the Milk Marketing Board, there are indications of dissatisfaction amongst farmers at the lack of uniformity in the administration of the Order. Complaints are frequently heard that a farmer who has been refused a Licence in one district (and who therefore fails to qualify for the bonus of the Milk Marketing Board) would, with similar premises and equipment be granted a licence in the district of another Authority.

Whilst it is not contended that one uniform standard of inspection can be made applicable to all districts, it should be possible to obtain some measure of uniformity in the administration of the Order.

This might best be achieved by the formation of Regional Milk Advisory Committees on the lines of the existing Regional Smoke Abatement Advisory Committees. If these Committees were formed general agreement could be reached on such matters as the following :—

- (1) Provision of free veterinary service for the quarterly inspection of herds or a uniform standard of charges for this service.
- (2) Scale of fees to be charged for the various classes of licences.
- (3) Uniform system of sampling for bacteriological examination and the number of adverse samples to be allowed before cancellation of licences.
- (4) Standards of equipment.

Bacteriological Examination of Milk.—In the routine examination of milk supplies 156 samples were sent during the year for examination for the presence of tubercle bacilli by guinea pig inoculation tests. This represents an increase of 60 over the number (96) examined during 1934 and is due mainly to the strict supervision maintained over supplies to schools under the Milk in Schools Scheme.

In addition to the 156 routine samples examined, a further 43 samples taken in suspected cases, or in the following up of previous samples were also examined.

Dealing only with the 156 routine samples and deducting from them five samples in respect of which the guinea pigs died too soon for a definite diagnosis to be made, positive evidence of tubercle bacilli was found in 17 or 11.2% of the samples taken. This is considerably higher than the corresponding percentage for the previous year (5.3%), but not appreciably different from those for the years 1932 and 1933.

Table 34 shows the percentages of infected samples and the area of production of the samples examined during the past four years.

In addition to the samples of milk taken for examination for tubercle bacilli and 54 samples taken in connection with the Clean Milk Competition, 233 samples were examined for bacterial counts and the presence of bacillus coli. This shows a very considerable increase over that of the previous year when only 37 samples were taken, and is due partly to the supervision of school milk supplies and partly to an increase in the number of Graded Milk producers in the Borough.

The examination of milk for bacterial count and coli content is a measure of the cleanliness or otherwise of the milk, the presence of bacillus coli indicating particularly manurial contamination.

The results of the examinations are shown in Table 35. From this Table it will be seen that none of the 19 samples of Certified or Grade A (T.T.) Milk contained more than 30,000 bacteria per c.c., nor contained bacillus coli in 1/10th c.c. ; only two of the 58 samples taken from Grade A or Accredited Milk Producers contained bacteria in excess of 200,000 per c.c., and only eight samples contained bacillus coli in 1/100th c.c. ; whilst of the 117 samples of ungraded milk taken from ordinary milk producers 22 contained bacteria in excess of 200,000 per c.c., and 36 contained bacillus coli in 1/100th c.c. These figures demonstrate the superior cleanliness of graded over ungraded milks.

TABLE 34.
Tubercle Bacilli in Milk.
Areas of production of samples examined.

Area	Year	No. of routine samples examined	No. of samples in respect of which the guinea pig died too soon for a definite diagnosis to be made	No. of samples in respect of which a definite diagnosis was made	Samples shewing positive evidence of tubercle bacilli	
					Number	Percentage
1932						
St. Helens.....		27	—	27	2	7.4%
Lancashire C. C.		29	1	28	6	21.4%
Cheshire C.C.		34	—	34	3	8.8%
* Pasteurised		4	—	4	—	—
Total		94	1	93	11	11.8%
1933						
St. Helens.....		15	—	15	1	6.7%
Lancashire C. C.		33	2	33	6	18.2%
Cheshire C. C.		30	—	28	1	3.6%
* Pasteurised		6	—	6	1	16.6%
Total		84	2	82	9	11.0%
1934						
St. Helens.....		16	1	15	3	20.0%
Lancashire C.C.		41	1	40	1	2.5%
Cheshire C.C.		31	—	31	1	3.2%
* Pasteurised		8	1	7	—	—
Total		96	3	93	5	5.3%
1935						
St. Helens.....		45	—	45	5	11.1%
Lancashire C.C.		55	3	52	7	13.4%
Cheshire C.C.		36	1	35	5	14.2%
* Pasteurised		20	1	19	—	—
Total		156	5	151	17	11.2%

* As the pasteurised milk was mixed milk from several areas the area of production of the samples examined was unknown.

Clean Milk Competition.—In continuation of the educational policy commenced by the Health Committee some years ago and commented upon from time to time in previous annual reports, another clean milk competition, the fifth of the series, was held during 1935. The conditions governing the competition were the same as in previous years and producers of non-graded milk in the Lancashire County Area retailing milk in St. Helens, were again invited to compete. 9 producers in the Borough and 10 in the Lancashire County Area entered the Competition.

As most milk producers in St. Helens have entered previous competitions they can now be regarded as having had adequate instruction in clean milk production. The competitions can, therefore, no longer be regarded as merely educational. They are, however, still of value in maintaining the competitive spirit and, by widening the scope of future competitions, their value will be enhanced.

In the past the system of judging has been on the lines laid down in the Ministry of Agriculture's "Guide to the Conduct of Clean Milk Competitions." In the next competition not only the cleanliness and keeping quality of the milk will be taken into account, but also the quality as judged by chemical analysis and its freedom from tubercle bacilli, as these are matters which are, to some extent at least, within the control of the milk producer. The competition will be entitled the "Better Milk Competition" and samples will be taken throughout the full twelve months of the year and not during six months only as hitherto. By this competition it is hoped to encourage the producer not only to give his attention to all aspects of milk production but to do so consistently.

Milk in Schools Scheme.—Very strict supervision of milk supplied to schools under the Milk in Schools Scheme is being maintained. In my annual report for last year I gave the conditions to be observed for the continuance of approval of supplies to schools, and in order to ensure that these conditions are being complied with, the following system of sampling is being carried out :—

- (a) **Chemical Analysis.**—One sample of milk supplied to each school department is taken every three months. There were at the end of the year 83 departments being supplied with milk and this means that approximately

332 samples will be taken each year. For this purpose the Gerber method of analysis is being used. These samples are additional to the routine samples taken under the Food and Drugs (Adulteration) Act, 1928.

- (b) **Bacterial Count and the presence of Bacillus Coli.**—One sample is taken from each supplier once each month. In the case of a supplier with more than one source of supply, one sample is taken monthly from each source and if the supplier supplies more than one school department, the samples are taken in rotation from each department supplied. There were at the end of the year 11 suppliers with 13 sources of supplies and the number of samples to be taken each year for this purpose will be approximately 156.
- (c) **Examination for the presence of Tubercle Bacilli.** Except that one sample is taken from each supplier once every three months, the same system of sampling is carried out as for bacterial counts and the presence of bacillus coli. The number of samples to be taken each year will be approximately 52.

It, upon examination, a sample of milk is found to contain evidence of tubercular infection, approval of the supply is immediately withdrawn and arrangements are made by the Department for an alternative supply to be provided. Approval is also withdrawn where two or three consecutive samples from a particular source show excessive bacterial counts or coli content.

Ample supplies of graded milks are now available and no new supplies to schools are approved unless the milk is a graded milk. Only one supplier is now supplying an ungraded milk and notice has been given to him that approval of this supply will be withdrawn.

Unless adequate supervision is exercised there appears to be serious possibility of the spread of infection in schools by means of improperly sterilised milk bottles and by the further use of straws which have once been used. Repeated warnings are given to suppliers regarding the need for adequate sterilisation of milk bottles, and Head Teachers have been advised to ensure the destruction of all used straws.

There is no doubt that the Milk in Schools Scheme will eventually result in the general improvement in the health of school children. There would be immense benefit from a public health point of view if the scheme could be extended in other directions, e.g., to include juvenile workers in large industrial undertakings.

TABLE 35.
Bacterial Counts in Samples of Graded and Ungraded Milks.

No. of Samples	Grade	Number of bacteria per c.c.			Colon Bacilli present in	
		Under 30,000	30,000 to 100,000	100,000 to 200,000	1/10th c.c.	1/100th c.c.
16	Certified	16	—	—	—	—
3	Grade A. (T.T.)	3	—	—	—	—
43	Grade A.....	31	11	1	—	6
15	Ungraded milk from Accredited Producers	11	2	—	—	2
117	Ungraded Milk from Ordinary Producers	72	17	6	—	36
39	Pasteurised	32	4	2	—	9

Under the Milk (Special Designations) Order, 1923, Certified Milk must not contain more than 30,000 bacteria per c.c. and colon bacilli must be absent in 1/10th c.c. Grade A (T.T.) and Grade A Milk must not contain more than 200,000 bacteria per c.c. and colon bacilli must be absent in 1/100 c.c.

Pasteurised Milk must not contain more than 100,000 bacteria per c.c. There is no bacterial standard for ungraded milk.

In addition to the above samples, 54 samples were taken in connection with the Clean Milk Competition.

FOOD AND DRUGS (ADULTERATION) ACT, 1928, etc.—Food and Drugs (Adulteration) Act, 1928.—During the year, 329 formal samples and 157 informal samples were taken for analysis.

The natures of the samples taken, with the results of examination by the Public Analyst, are shown in Table 36.

Table 36.

Number of samples taken under the Food and Drugs (Adulteration) Act, 1928, during 1935, and the results of analysis by the Public Analyst.

ARTICLE	Number of Samples Taken		Number Genuine		Number Adulterated	
	Formal	Informal	Formal	Informal	Formal	Informal
Bicarbonate of Soda	2	2	2	2	—	—
Cereals :						
Cornflour	2	1	2	1	—	—
Pearl Barley	6	—	6	—	—	—
Rice	5	—	5	—	—	—
Self-Raising Flour	4	—	4	—	—	—
Cocoa	1	1	1	1	—	—
Coffee	5	—	5	—	—	—
Condiments	10	13	9	13	1	—
Confectionery, etc.	2	3	1	2	1	1
Cream of Tartar	3	3	3	3	—	—
Dried Fruits, Spices, etc.	9	8	9	8	—	—
Drugs, etc.	14	11	12	10	2	1
Jams and Jellies	5	4	5	3	—	1
Lard	15	3	15	3	—	—
Lemon Cheese	1	2	1	2	—	—
Margarine	9	2	9	2	—	—
Milk and Milk Products :						
Butter	14	2	14	2	—	—
Cheese	3	—	3	—	—	—
Cheshire Cheese	5	1	5	1	—	—
New Milk	162	80	151	60	11	20
Fresh Cream	1	1	—	1	1	—
Potted and Tinned Meat and Fish	11	4	11	4	—	—
Sausages	12	—	12	—	—	—
Sweets	4	—	4	—	—	—
Sugar.....	5	1	5	1	—	—
Tartanic Acid	—	2	—	2	—	—
Tea	4	3	4	3	—	—
Tinned Fruits, etc.	4	8	4	8	—	—
Tinned Syrup	—	1	—	1	—	—
Tripe	5	—	5	—	—	—
Wines and Spirits :						
Fruit Wine	1	1	1	1	—	—
Ginger Flavour Wine	1	—	1	—	—	—
Irish Whiskey	1	—	1	—	—	—
Scotch Whiskey	1	—	1	—	—	—
Rum	2	—	2	—	—	—
Total	329	157	313	134	16	23

In addition to the above, 207 informal samples of milk supplied to schools were examined by means of the Gerber Test in the Department's own laboratory.

The appended statement shows the action taken in the case of adulterated samples taken formally :—

(a) Legal proceedings instituted under the Food and Drugs (Adulteration) Act, 1928.

Sample No.	Article.	Adulteration and Result of Proceedings.
32	Tincture of Iodine.	17% deficient in Iodine and 19% deficient in Potassium Iodide. Fined £1/0/0 and costs.
34	Tincture of Iodine	5% deficient in Iodine and 5% deficient in Potassium Iodide. Dismissed on payment of £1/15/0 costs.
284	Fresh Cream Savoys.	The fat in the filling consisted of a fat other than milk fat. Dismissed on payment of £1/5/0 costs.

(b) No legal proceedings instituted, but in all cases the sellers were warned by the Health Committee.

Sample No.	Article.	Adulteration.
64	New Milk	8% deficient in milk fat.
66	New Milk	6% deficient in milk fat.
91	New Milk	6% deficient in milk fat.
150	Thick Rich Cream	Milk Fat 20.25%. Other Milk Solids 7.55%. Water 72.2% Milk fat insufficient to justify designation "Thick Rich Cream."
297	New Milk	4% deficient in milk fat.
891	New Milk	6% deficient in milk fat.
896	New Milk	3% deficient in milk fat.
915	Malt Vinegar	4% deficient in Acetic Acid.

Sample No.	Article.	Adulteration.
950	New Milk	9% deficient in milk fat.
969	New Milk	10% deficient in milk fat.
975	New Milk	15% deficient in milk fat.
2750	New Milk	7% deficient in milk fat.
“Appeal-to-Cow ”		
Sample		
977	New Milk	5% deficient in milk fat.

Examination of Milk for Dirt.—One sample of milk was submitted to the Public Analyst for examination for dirt and was found to contain 4 parts per 100,000 of moist sediment. 54 samples were also taken by the Department in connection with the Clean Milk Competition and examined by the sediment tester. The discs are mounted and framed and form a permanent record of the progress made each year in clean milk production.

The Public Health (Condensed Milk) Regulations, 1923 and 1927.—No infringements of these Regulations were found during the year.

The Public Health (Dried Milk) Regulations, 1923 and 1927.—No infringements of these Regulations were found during the year.

Artificial Cream Act, 1929.—No premises are registered under this Act in St. Helens and no infringements were found.

Ice Cream Premises.—Under the St. Helens Corporation Act, 1933, manufacturers and vendors of ice cream and the premises used by them must now be registered by the Local Authority who have power either to refuse registration or to cancel registration. As mentioned in my annual report for last year the same standards are required for ice cream premises and equipment as those for dairies, and the insistence upon these standards has reduced very considerably the number of applications for registration during the year.

During the inspection of ice cream dairies the necessity for the cleansing and sterilisation of equipment immediately after use is always stressed and inquiries are always made regarding the health and cleanliness of the workers. The wearing of clean white overalls is also advised during manufacture and distribution.

Much of the ice cream sold in St. Helens is distributed from cartons and pre-packed wrappers which are stored in electric refrigerators pending sale, and in many instances where the ice cream is retailed from bulk this is also manufactured and sold from electric refrigerators. In one instance the "mix" is pasteurised before freezing.

Three samples of ice cream were taken during the year for bacteriological examination with the following results :—

Sample No.	Bacteria per c.c.	Presence or absence of Coliform bacillus in 1/100th c.c.
452	37,000	Absent.
453	274,000	Absent.
454	7,600	Absent.

During the year one person was warned by the Committee for selling ice cream without being registered.

The following are the particulars of registrations at the end of the year :—

Manufacturers and Vendors	.....	.....	.....	.....	42
Vendors only	.....	.....	.....	.....	37
Premises for manufacture and sale	.....	.....	.....	.....	42
Premises for sale only	.....	.....	.....	.....	37

A total of 267 visits of inspection were made during the year.

Public Health (Preservatives in Food) Regulations.—All samples submitted to the Public Analyst under the Food and Drugs (Adulteration) Act, 1928, are also examined for the presence of preservatives.

Two informal samples of milk were found to contain traces of boric acid but further samples from the same source were found to be free from this preservative. A full investigation was afterwards made at the dairy concerned but the cause of the adulteration could not be traced.

One sample of pasteurised milk was examined for the presence of copper but no trace of this metal was found.

Fertilisers and Feeding Stuffs Act, 1926.—11 informal samples of fertilisers and feeding stuffs were taken under the above Act, during 1935, and all were found to be genuine.

No infringements of the Act in respect of labelling were found during the year.

Poisons and Pharmacy Act, 1908.—Two licenses were renewed during the year under Section 2(1) of the Poisons and Pharmacy Act, 1908, for the sale of poisonous substances for use exclusively in agriculture and horticulture.

These licenses were only granted until April 30th, 1936, and not for the usual period of twelve months, pending the coming into operation on May 1st, 1936, of the Pharmacy and Poisons Act, 1933. This latter Act repeals Section 2 of the Poisons and Pharmacy Act, 1908.

BAKEHOUSES.—There are 90 bakehouses on the Register, one of which is underground. Mechanical power is used in 32 instances.

149 visits of inspection were made during the year and 6 sanitary defects were found and remedied.

DISEASES OF ANIMALS ACTS.—**Tuberculosis Order, 1925.**—During the year 8 notifications were received under the Tuberculosis Order, 1925, of cattle within the Borough suspected to be suffering from tuberculosis. Of these, 2 were discovered by the

Council's Veterinary Inspector, 5 were discovered as a result of the routine bacteriological examination of milk in St. Helens, and 1 resulted from an investigation of a report from the Haydock Urban District Council that tubercle bacilli had been found in a sample of milk taken in their area. In each instance slaughter was carried out by the Council at the Public Abattoir and evidence of tuberculosis was found on post-mortem examination.

Particulars relative to the animals slaughtered, the form of the suspected disease, and the classification of the stage of the disease as revealed at the post-mortem examination, are given in the following summary :—

Description	Form of Suspected Disease.	Classification of the disease at post-mortem examination.
Cow in Milk	Giving tuberculous milk	Advanced.
do.	Tuberculosis with chronic cough.	do.
do.	Giving tuberculous milk	do.
do.	do.	Not Advanced
do.	Tuberculosis with chronic cough.	do.
do.	Giving tuberculous milk	do.
do.	do.	Advanced.
do.	do.	do.

Anthrax.—No case of Anthrax was reported during the year.

Swine Fever.—14 cases of suspected Swine Fever were reported during the year. In no instance was the disease confirmed by the Ministry of Agriculture.

Markets, Sales and Lairs Order of 1925.—There are two markets for the sale of animals in St. Helens. One of these is situated behind the Royal Raven Hotel, Church Street, and the other between 5 and 21 Parr Street.

In each case the lairs used in connection with these markets are licensed with the Local Authority.

XIV.—SANITARY CIRCUMSTANCES OF THE AREA.

WATER.—The water supply is from deep wells and boreholes in new red sandstone at Eccleston Hill, Whiston, Knowsley, Kirkby, and Melling, supplemented by a supply from the Liverpool Corporation Rivington Main, and water from coal measures at Collins Green. The water from the last mentioned source is subjected to chlorination and high pressure filtration before distribution.

During the year important extensions of water mains have been carried out in Clock Face Road, Canal Street, Washway Lane, City Road, Gaskell Street, Derbyshire Hill Road, and Gartons Lane. Despite these improvements there is still, however, a shortage in the supply of water to several other parts of the town. With the large number of houses now being erected, and the possibility of an even larger number in the future this is a matter which should continue to receive attention.

The water is of a high degree of purity, though hard. The total hardness is reduced from 22.6 degrees to 10.5 by a softening process before distribution.

Three samples of water taken from taps of dwelling-houses in the Cowley Hill, Sutton and Thatto Heath districts were taken for bacteriological examination during the year. The following are the results of these examinations :—

	Bacteria per c.c.		B. Coli.
	37° C	22° C	
Sample No. 1	6	46	Absent in 100 c.c.
Sample No. 2	4	13	Absent in 100 c.c.
Sample No. 3	2	19	Absent in 100 c.c.

RIVERS AND STREAMS.—The position outlined under this heading in previous Reports is substantially unchanged.

SEWERS AND SEWAGE DISPOSAL.—With the increasing erection of new houses, the need for the provision of an adequate sewerage system and sewage disposal works is imperative. Though the construction of a separate sewage disposal plant for the Sutton Manor district is approaching completion, the position in regard to other districts remains unsatisfactory and the position in

regard to the pollution of the St. Helens Canal has become steadily worse. As mentioned from time to time in previous annual reports, this Canal receives untreated sewage from the Gerards Bridge and Haresfinch districts. Since its abandonment for traffic purposes, the water level in certain parts of the canal is, during considerable periods of the year, extremely low. With an increase in the volume of sewage discharged into it due to recent building developments in the Haresfinch district, these parts of the canal are now little more than open sewers.

At the end of the year considerable progress had been made by the Borough Engineer's Department in the collection of data for the proposed re-sewering of those parts of the Borough not at present satisfactorily sewered and also for the proposed new Sewage Works, and preliminary plans for several of the new main intercepting sewers have been prepared.

Apart from the problem of the pollution of canals and streams at present occurring, one of the most serious problems is the erection of houses in districts where no sewers are available. These are at present being provided with septic tanks and if nuisance is to be avoided, constant supervision of these will be necessary.

CLOSET ACCOMMODATION.—During the year two privy middens were converted to the fresh water carriage system. In addition 45 houses provided with pail closets and one house with a privy midden were demolished under the Housing Act, 1930. It is estimated there are still 442 houses with privy middens and 122 houses with pail closets, but demolition or clearance orders are operative in respect of 91 of these and, when complied with, a further 57 pail closets and 34 privy middens will have been abolished. As the slum clearance programme proceeds there will be a still further reduction in the number of these closets.

There are also 58 pail closets and one privy midden at various schools and works.

SCAVENGING.—The removal and disposal of house refuse is carried out by the Borough Engineer's Department. There are no refuse disposal works.

The following shows the percentage amount of refuse disposed of on each tip at present in use :—

Parr Depot	50%
Rivington Road	20%
Merton Bank Road	14%
Eltonhead Road	10%
Cemetery	6%

Occasional complaints of nuisance are still received regarding these tips and emphasise the importance of strict compliance with the recommendations for controlled tipping.

During 1935, 299 ashpits were abolished and 343 galvanised metal dustbins were provided as compared with 206 and 220 respectively for the previous year.

SANITARY INSPECTION OF THE AREA.—The total number of visits paid by sanitary inspectors during the year was 29,903. The nature of these inspections is shown in Table 38, and Table 39 contains a list of the notices served and the results of such notices.

TABLE 38.
Number and nature of inspections during 1935.
Complaints of Nuisances.

Number of Complaints Investigated :—	
1. Housing Defects	759
2. Choked and Defective Drains	393
3. Emission of Smoke	5
4. Accumulations of Offensive Matter	10
5. Miscellaneous	191
Inspections re Sanitation and Food Supply.	
Dwelling Houses inspected	2379
Common Lodging Houses	187
Houses-let-in-lodgings	29
Common yards, back-roads and passages	450
Horse-manure middensteads	159
Fried Fish Shops	264
Fishmongers and Greengrocers	743
Butchers' Shops	1,089
Ice Cream Shops	267
Factories	32
Workshops	688
Bakehouses	149
Workplaces.....	4
Offensive Trades	101
Private Slaughterhouses	444
Food Preparing and Storing Places	728
Places of Public Entertainment	132
Tents, Vans and Sheds	102
Schools	—

Table 38—Continued.

Inspections re Sanitation and Food Supply.						
Testing Drains :—						
By Smoke	.....	.....	.....	.....	.....	132
By Water	.....	.....	.....	.....	.....	13
By Coloured Water	.....	.....	.....	.....	.....	66
By Breaking Down	.....	.....	.....	.....	.....	40
Ashes Receptacles	.....	.....	.....	.....	.....	665
Dairies, Cowsheds and Milkshops	.....	.....	.....	.....	.....	711
Samples of Milk procured for :—						
Chemical Analysis	.....	.....	.....	.....	.....	449
Bacteriological Examination	.....	.....	.....	.....	.....	156
Bacterial Content	.....	.....	.....	.....	.....	287
Sediment	.....	.....	.....	.....	.....	55
Samples of Other Food and Drugs under the Food & Drugs						
(Adulteration) Act, 1928, etc.	.....	.....	.....	.....	.....	244
Samples of Fertilisers and Feeding Stuffs	.....	.....	.....	.....	.....	11
Samples of Sewage for Analysis	.....	.....	.....	.....	.....	—
Conversions	.....	.....	.....	.....	.....	3
Samples of Water procured	.....	.....	.....	.....	.....	3
Insufficient Water Supply	.....	.....	.....	.....	.....	8
Smoke Observations	.....	.....	.....	.....	.....	6
Visits to Glass Works (Straw Sterilization)	.....	.....	.....	.....	.....	36
Enquiries re Brokers' Licences	.....	.....	.....	.....	.....	13
Visits to work in progress (P.H. Acts, Housing Acts, Conversions, etc.)	.....	.....	.....	.....	.....	15,015
Rag Flock Acts	.....	.....	.....	.....	.....	—
Sanitary Accommodation in Shops	.....	.....	.....	.....	.....	—
Rats and Mice (Destruction) Act	.....	.....	.....	.....	.....	313
Miscellaneous Visits	.....	.....	.....	.....	.....	3,730
						29,903

TABLE 39.

Sanitary Defects—Number of notices served during 1935, and results.

Subject of Notice	Pre-liminary Notices	Statutory Notices	Number complied with	Number outstanding at end of year	Prose-cutions
Ditches requiring cleansing	—	—	—	—	—
Defective drains	170	66	157	15	—
Insufficient surface water drainage	—	—	—	—	—
Choked drains	185	38	178	10	—
Insufficient closet accommodation	1	1	2	1	—
Absence of proper sink	67	23	45	29	—
Conversion of trough closets to water closets	—	—	—	—	—
Defective trough closets	—	—	—	—	—
Defective water closets	156	46	136	36	—
Defective pail closets	—	—	—	—	—
Defective privy middens	3	1	4	3	—
Defective gullies and dishstones	153	30	162	3	—
Defective sink waste pipes	479	100	498	7	—
Defective W.C. cisterns and flushing fittings	136	29	129	12	—
Defective urinals	4	—	3	1	—
Defective soil pipes	10	3	7	6	—
Sink waste pipes connected with drains	—	—	—	—	—
Yards and passages unpaved	3	1	1	14	—
Defective yard paving	331	110	332	30	—

Table 39.—Continued.

Dampness arising from :—					
Defective roofs	997	329	1032	53	—
Defective eavesgutters	1007	263	1058	6	—
Defective downspouts	471	106	503	48	—
Defective external pointing	1021	275	1078	7	—
Insufficient lighting of rooms.....	—	—	—	—	—
Insufficient ventilation of rooms	65	17	63	17	—
Absence of ventilated foodstores	20	—	7	13	—
Unventilated foodstore	—	—	—	—	—
Insufficient water supply	—	—	—	—	—
Defective manure middensteads	1	—	—	3	—
Dwelling houses to be whitewashed	—	—	—	—	—
Defective chimney flues	42	23	46	7	—
Defective ashpits to be repaired	107	—	90	27	—
„ „ to be abolished.....	315	—	299	118	—
Galvanised Metal Dust Bins to be provided	337	—	343	33	—
Absence of ashes accommodation	57	10	56	33	—
Disused ashpits abolished	—	—	184	—	—
Defective window sash-frames and sashcords	1653	400	1674	51	—
Defective floors	669	257	654	67	—
Defective stairs	137	27	136	9	—
Defective internal plaster work	1135	229	1083	147	—
Defective fireplaces	531	175	485	59	—
Defective washboilers	373	74	370	15	—
Defective doors, cupboards, &c.	582	93	558	90	—
Defective gas pipes and fittings	28	15	27	1	—
Defective water pipes and fittings.....	5	—	4	1	—
Defective yard division walls	153	42	137	55	—
Dangerous and defective chimney stacks	47	15	34	16	—
Fractured internal walls	40	12	28	22	—
Defective and bulging external walls	84	34	46	43	—
Filthy condition of premises	37	4	40	—	—
Accumulation of manure or offensive matter	26	2	17	13	—
Keeping of animals, &c.	11	3	13	5	—
To abate overcrowding of dwelling houses	2	1	—	8	—
Miscellaneous	483	99	481	31	—
Contraventions of :—					
Milk and Dairies Order, 1926	47	—	18	35	—
Milk (Special Designations) Order, 1923	1	—	—	1	—
Public Health (Condensed Milk) Regulations, 1923 and 1927	—	—	—	—	—
Artificial Cream Act, 1929	—	—	—	—	—
Public Health (Meat) Regulations, 1924	14	—	3	18	—
Merchandise Marks Act, 1926	52	—	—	52	—
Agricultural Produce (Grading and Marking) Act, 1928	—	—	—	—	—
Sale of Food Order, 1921	1	—	—	1	—
Public Health (Preservatives, &c. in Food) Regulations.....	1	—	—	1	—
Factory and Workshop Acts	—	—	—	—	—
Contraventions of Bye-laws :—					
Common Lodging Houses	—	—	—	—	—
Houses-let-in-lodgings	—	—	—	—	—
Tents, vans, sheds	—	—	—	—	—
Slaughterhouses.....	—	—	—	—	—
Prevention of Nuisances	15	—	1	20	—
Drainage of existing buildings	—	—	—	—	—
	12265	2953	12222	1293	—

Referred to other Departments.

Choked Street Gullies, &c., reported to Borough Engineer.....	35
Waste Water reported to Water Department	135
Dangerous structures reported to Borough Engineer	7
Escapes of Coal Gas reported to Gas Department	21
Choked Sewers reported to Borough Engineer	14
Insufficient water supply reported to Borough Engineer	—
Unauthorised Erections reported to Borough Engineer	—
Choked Drains, etc. reported to Borough Engineer (Corporation property)	—
Unpaved Passages reported to Borough Engineer	—

During the year, 393 complaints of choked drains were made to the Department. Of this number, 208 drains were freed from obstruction by members of the staff of the sanitary department, thus obviating the necessity for serving notices upon the owners.

SMOKE ABATEMENT.—According to the report on Atmospheric Pollution issued by the Department of Scientific and Industrial Research no improvement in the pollution of the atmosphere over the country as a whole could be recorded for the year ended 31st March, 1935, over the previous two or three years. In this report it is also stated that “the conclusion one must draw is that by comparison with last year there is no improvement but rather a slight set back.”

These remarks apply equally to St. Helens, where the total solids deposited from the atmosphere equalled approximately 1,596 pounds per acre during the year ending 31st March, 1936, as compared with 1,537 pounds per acre during the preceding twelve months and 1,122 pounds per acre during the year ended 31st March, 1934. Though some may find pleasure in this as indicating greater industrial activity, it is a warning that the question of smoke abatement cannot be ignored.

Though St. Helens has not yet adopted a Byelaw regulating the emission of black smoke, every endeavour has been made to minimise the nuisance by educational methods. Factories and works from which the nuisance arises are visited and advised and during the year enamelled plaques, issued by the Federation of British Industries and showing in diagramatic form the points of loss of efficiency in

boiler plants likely to lead to black smoke, were obtained by many firms for the use of their stokers. An attempt was also made during the year to form classes for stokers in Fuel Economy and Boiler House Practice, but sufficient students could not be obtained.

The domestic side of the problem has also received attention. A special Sub-Committee representing the Health, Housing, Gas and Electricity Committees was appointed to consider the question, and it is hoped that as a result of the activities of that Sub-Committee the question of the use of smokeless fuels will receive more attention.

FACTORIES AND WORKSHOPS.—(a) Factories—One defect remediable under the Public Health Acts was reported by H.M. Inspector of Factories, and this was remedied during the year.

(b) Workshops—The number of workshops registered is 153, and Table 40 shows the classes of such workshops.

Table 40.
Registered workshops.

Workshops on the Register (s. 131) at the end of the year.	Number.
Dressmakers and mantle making	3
Milliners	6
Tailors	10
Hosiery Knitters	—
Joiners, builders, cabinet-makers and plumbers, etc.	22
Blacksmiths, wheelwrights, coach builders and masons	7
Weighing machine repairers	2
Cloggers and boot repairers	53
Cycle Makers	3
Tripe Dressers	2
Herbal Brewers	3
Seltzogene charge maker	1
Cab washing	2
Saddler	1
Sundries	26
Ice Cream Makers	4
Workshop Laundries	8
Total Number of Workshops on Register	153

(c) Outworkers—No lists of outworkers were received from employers during the year.

Table 41 gives particulars of the administrative action taken under the Factory and Workshop Act, 1901.

Table 41.

Factories, Workshops and Workplaces.

1.—Inspection of Factories, Workshops, and Workplaces, including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises (1)	Number of		
	Inspections (2)	Written Notices (3)	Occupiers Prosecuted (4)
Factories (including Factory Laundries)	186	9	—
Workshops (including Workshop Laundries)	688	6	—
Workplaces (other than Outworkers' premises)	4	—	—
Totals	878	15	—

Table 41—Continued.

2.—Defects found in Factories, Workshops and Workplaces.

Particulars. (1)	Number of Defects.			Number of offences in respect of which Prosecutions were instituted. (5)
	Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	
<i>Nuisances under the Public Health Acts—*</i>				
Want of cleanliness	11	11	—	—
Want of Ventilation	—	—	—	—
Other nuisances.....	5	5	—	—
Sanitary accommodation— insufficient	1	1	—	—
unsuitable or defective	—	—	—	—
not separate for sexes	—	—	—	—
<i>Offences under the Factory and Workshop Acts—</i>				
Illegal occupation of underground bakehouse	—	—	—	—
Totals	17	17	—	—

* Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

3.—Outwork in unwholesome premises, Section 108—Nil.

PREMISES AND OCCUPATIONS WHICH CAN BE CONTROLLED BY BYELAWS OR REGULATIONS.—Offensive Trades.—There are 5 offensive trades in the borough, consisting of 4 tripe boilers and 1 gutscraper.

During the year, 101 visits were paid to premises of this nature.

Tents, Vans, Sheds, etc.—There has been no material change during the past year in regard to these structures, of which 50 are known to be used for human habitation. Apart from the serious overcrowding that takes place in them, most are without adequate closet accommodation, house refuse accommodation, water supply or drainage. With the passing of the Housing Act, 1935, they can now be considered as houses for slum clearance purposes, and that appears to be the most satisfactory method of dealing with those at present in occupation. Further development of this form of habitation can be controlled under Section 108 of the St. Helens Corporation Act, 1933.

Regular inspections of these premises have been made by the staff during the year, and 102 visits were paid.

Houses-Let-in-Lodgings.—Revised byelaws for the control of houses-let-in-lodgings were confirmed by the Minister of Health on the 31st July, 1935, and came into operation on the 1st of September.

With the previous byelaws, many premises known to be used for this purpose could not be dealt with owing to their rateable value and rents being above prescribed limits. This limiting clause does not appear in the revised byelaws.

Houses-let-in-lodgings in St. Helens are much in need of improvement, and with this end in view, a survey of this class of premises will shortly be undertaken by the Department.

Common Lodging Houses.—The number of premises registered as Common Lodging Houses at the end of the year was 5, as compared with 6 at the end of 1934.

Revised byelaws for controlling common lodging houses are still under consideration by the Ministry.

All registered premises were regularly inspected, 187 visits being paid for this purpose.

Byelaws with respect to Nuisances.—These Byelaws, which were obtained in 1930, deal with the prevention of nuisances arising from snow, filth, dust, ashes, and rubbish, and for the prevention of the keeping of animals on any premises so as to be injurious to health.

The byelaws have proved very effective for the control of pig-keeping. There were 44 persons in the borough known to be engaged in the keeping of pigs at the end of the year.

Legal proceedings under these Byelaws were taken against an occupier of stable premises for failure to provide a properly constructed manure middenstead and to remove manure at least once weekly. Fines of £1/0/0 and 10/- respectively were imposed in respect of these offences.

OTHER SANITARY CONDITIONS.—Rats and Mice Destruction Act, 1919.—The duties of Rat Officer under the Rats and Mice Destruction Act, 1919, are now carried out by the Chief Sanitary Inspector.

31 complaints of infestation of premises by rats were received during the year. As in previous years it was found that the chief cause of infestation was either defective drains or sewers in the neighbourhood of the premises concerned. When these defects were made good no further complaints were received.

Investigation of complaints of rat infestation as carried out by the staff involves much smoke testing of drains and sewers and takes up a considerable amount of the Department's time. It is felt, however, that a permanent removal of the cause of infestation is much more satisfactory than the temporary expedient of laying poison baits.

Shops Act, 1934.—This Act, which came into operation on December 30th, 1934, places upon the Sanitary Authority the duty of enforcing the provisions of the Act relating to the ventilation and temperature of shops and to the provision of sanitary conveniences.

A survey of all the shop premises in the Borough for the purpose of enforcing these requirements was commenced during the year.

The administration of the Act will add very considerably to the work of the sanitary staff during the forthcoming year.

Places of Public Entertainment.—132 visits were paid to Places of Public Entertainment during 1935. The condition of these premises throughout the year was found to be generally satisfactory.

Canal Boats.—There is only one canal in St. Helens, viz., the St. Helens Canal, and this has not been used for traffic for a number of years. An order authorising the abandonment of this canal was made by the Ministry of Transport on April 2nd, 1931.

Mortuary.—A public mortuary with post-mortem room is maintained behind the Town Hall and is under the supervision of the Medical Officer of Health. During the year 29 bodies were received into the mortuary and 10 post-mortem examinations were conducted.

Arrangements for the Disposal of the Dead.—The cemetery provided and maintained by the Local Authority is 44.22 acres in extent, of which 23 acres are still available for burial purposes. In addition there are 23.80 acres of land adjoining which can be utilised for extension purposes.

There are private cemeteries still in use in connection with the following churches :—

St. Peter's, Parr ; St. Nicholas's, Sutton ; St. Thomas's, Windsor Road ; St. Anne's, Sutton ; and Windleshaw Abbey.

Swimming Baths.—Indoor swimming baths, situate in Boundary Road, are maintained by the Corporation. There are two plunge-baths and the method of the purification of the water is by means of continuous filtration and chlorination.

The Rag Flock Acts, 1911 & 1918.—No sample of rag flock was taken during the year.

Sanitary Condition of Schools.—During 1935 there were 40 public elementary schools, with 83 departments, in the borough.

Conditions in council schools are on the whole good, all these being of fairly recent construction. In some of the older schools, however, pail closets are still in existence, whilst in others trough closets with automatic flushing cisterns are still being used. I would urge that wherever possible the remainder of the unsatisfactory types of closets should be replaced.

XV.—HOUSING.

STATISTICS.—Of the 732 houses erected during 1935, 293 were erected by the Local Authority and 439 by private or commercial enterprise.

Table 42 shows the number of dwelling houses erected in each ward since 1904.

Table 42.

The wards of the borough in which dwelling-houses have been erected during the years mentioned.

Year	North Eccles- ton	South Eccles- ton	Central	North Windle	South Windle	Hard- shaw	East Sutton	West Sutton	Parr	Total
1904	105	53	7	37	18	47	59	1	70	397
1905	19	93	1	44	16	90	42	10	54	369
1906	11	51	—	31	13	31	73	24	39	273
1907	22	38	—	26	—	22	77	3	29	217
1908	2	52	—	4	2	27	22	—	20	129
1909	—	36	—	10	—	10	6	3	10	75
1910	2	31	—	10	—	24	18	—	25	110
1911	14	20	—	—	—	30	75	26	12	177
1912	35	28	—	4	—	26	28	58	1	180
1913	10	31	—	—	3	19	14	99	6	182
1914	10	42	—	9	16	14	20	63	29	203
1915	6	9	—	26	1	2	8	25	27	104
1916	—	12	—	1	1	2	4	16	16	52
1917	—	—	—	—	—	—	—	9	—	9
1918	—	—	—	—	—	—	—	3	—	3
1919	—	1	3	—	—	—	—	—	—	4
1920	—	—	—	—	—	—	—	—	—	—
1921	—	1	—	41	—	—	—	6	—	48
1922	—	1	—	164	—	—	—	—	—	165
1923	1	5	2	2	—	2	—	33	—	45
1924	2	24	—	25	—	—	2	45	5	103
1925	8	76	—	90	—	1	9	48	15	247
1926	19	172	—	106	16	4	19	63	51	450
1927	33	189	—	125	3	68	160	14	56	648
1928	12	116	3	237	5	2	97	13	335	820
1929	4	219	—	35	—	21	26	5	185	495
1930	24	148	1	39	—	53	41	3	54	363
1931	79	61	—	52	1	15	45	29	17	299
1932	449	77	1	10	—	27	69	37	3	673
1933	115	56	2	20	—	34	69	1	46	343
1934	41	43	—	52	—	20	100	13	74	343
1935	74	238	4	104	3	32	133	59	85	732

A statement as to the number of houses erected with and without State assistance, together with a summary of the work of the department in regard to housing, is given in Table 43.

Table 43.

Housing.

Number of new houses erected during the year :—

(a) Total (including numbers given separately under (b))	732
(b) With State assistance under the Housing Acts :	
(i) By the Local Authority	80
(ii) By private or commercial enterprise	—
(c) Without State Assistance under the Housing Acts :	
(i) By the Local Authority.....	213
(ii) By private or commercial enterprise.....	439

1.—Inspection of dwelling-houses during the year :—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	2379
(b) Number of inspections made for the purpose.....	17394
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	204
(b) Number of inspections made for the purpose	2652
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation.....	108
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation.....	2252

2.—Remedy of Defects during the year without service of formal notices :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers.....	1887
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3.—Action under Statutory Powers during the year :—

A.—Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930 :—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs..... nil.

(2) Number of dwelling-houses which were rendered fit after service of formal notices :—

(a) By owners nil.

(b) By Local Authority in default of owners..... nil

B.—Proceedings under Public Health Acts :—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied 307

(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—

(a) By owners 252

(b) By Local Authority in default of owners..... nil.

C.—Proceedings under Sections 19 and 21 of the Housing Act, 1930 :—

(1) Number of dwelling-houses in respect of which Demolition Orders were made..... 30

(2) Number of dwelling-houses demolished in pursuance of Demolition Orders..... 5

D.—Proceedings under Section 20 of the Housing Act, 1930 :—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made nil.

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit nil.

SLUM CLEARANCE.—Further satisfactory progress towards the completion of the Council's slum clearance programme was made during the year.

There are, however, many houses in St. Helens, as in most other industrial towns, which, though not yet sufficiently decayed to be included in slum clearance schemes, cannot be said to conform with modern housing standards. With further deterioration, and the improvement in housing standards now generally demanded, these houses will have to be dealt with at some future time. It appears, therefore, that slum clearance will be a normal activity of the Department for many years to come.

During 1935 thirteen areas involving 55 houses were represented as clearance areas and 37 individual unfit houses and 16 back-to-back houses were represented under Section 19. This will involve the displacement of 475 persons.

Clearance Areas.—The following are the particulars of the clearance areas dealt with :—

Fleet Lane (No. 2) Area—Official Representation made 23rd April, 1935, and Clearance Order made 5th June, 1935 ; confirmed 6th November, 1935. No. of dwelling-houses 3. The properties included were 462 Fleet Lane and Nos. 1 and 2 Back Fleet Lane.

Platt Street Area—Official Representation made 21st May, 1935, and Clearance Order made 3rd July, 1935 ; confirmed 6th November, 1935. No. of dwelling-houses, 3. The properties included were Nos. 1, 3 and 5 Platt Street.

Fleet Lane (No. 3) Area—Official Representation made on 21st May, 1935, and Clearance Order made on 3rd July, 1935 ; confirmed 6th November, 1935. No. of dwelling-houses, 4. The properties included were Nos. 422, 424, 426 and 428 Fleet Lane.

Fleet Lane (No. 1) Area—Official Representation made on 9th October, 1935. These properties are in the ownership of the Council and no Clearance Order was made. No. of dwelling houses, 3. The properties included were Nos. 523, Back Fleet Lane ; and 523 and 525, Fleet Lane.

Littlers Court Area—Official Representation made on 9th October, 1935. The properties are in the ownership of the Council and no Clearance Order was made. No. of dwelling-houses, 8. The properties included were Nos. 309, Derbyshire Hill Road ; and 1, 3, 5, 7, 9, 11 and 13, Littlers Court.

Newton Road (No. 1) Area—Official Representation made on 9th October, 1935, and Clearance Order made 3rd January, 1936 ; confirmed on 21st April, 1936. No. of dwelling-houses, 3. The properties included were Nos. 1, 3 and 5 Newton Road.

Newton Road (No. 2) Area—Official Representation made on 9th October, 1935, and Clearance Order made on 3rd January, 1936 ; confirmed on 21st April, 1936. No. of dwelling-houses, 3. The premises included were Nos. 7, 9 and 11, Newton Road.

Blackbrook Road Area—Official Representation made on 9th October, 1935, and Clearance Order made on 3rd January, 1936 ; confirmed on 21st April, 1936. No. of dwelling-houses, 7. The properties included were Nos. 63, 65, 67, 69 and 71 Blackbrook Road ; and 1 and 2 Back Blackbrook Road.

Berrys Lane Area—Official Representation made on 13th November, 1935, and Clearance Order made on 4th March, 1936 ; confirmation not yet received. No. of dwelling-houses, 3. The properties included were Nos. 2, 4 and 6, off Berrys Lane.

Fleet Lane (No. 5) Area—Official Representation made on 13th November, 1935, and Clearance Order made on 4th March, 1936 ; confirmation not yet received. No. of dwelling-houses, 2. The properties included were Nos. 364 and 366 Fleet Lane.

Foster Street Area—Official Representation made on 13th November, 1935, and Clearance Order made on 6th May, 1936 ; confirmation not yet received. No. of dwelling-houses, 3. The properties included were Nos. 9, 12 and 14 Foster Street.

Fleet Lane, (No. 4) Area—Official Representation made on 13th November, 1935, and Clearance Order made on 4th March, 1936 ; confirmation not yet received. No. of dwelling-houses, 4. The properties included were Nos. 330, 332, 334 and 336, Fleet Lane.

Endowment Row Area—Official Representation made on 13th November, 1935, and Clearance Order made on 4th March, 1936 ; confirmation not yet received. No. of dwelling-houses, 9. The properties included were Nos. 1, 3, 5, 7, 9, 11, 13, 15 and 17, — Endowment Row.

Individual Unfit Houses.—Official Representation under Section 19 of the Act was made regarding the following individual unfit houses. Demolition Orders were made in respect of 30 houses and undertakings not to use the houses for human habitation were accepted in respect of the remaining seven :—

<i>Description of dwelling-house.</i>	<i>Date Represented</i>	<i>Date Demolition Order made.</i>
301 Newton Road	26/3/35	3/7/35
303 Newton Road	26/3/35	3/7/35
305 Newton Road	26/3/35	3/7/35
307 Newton Road	26/3/35	3/7/35
309 Newton Road	26/3/35	2/10/35
147 Fleet Lane	23/4/35	3/7/35
149 Fleet Lane	23/4/35	3/7/35
3 Sutton Moss	23/4/35	3/7/35
39 Sutton Moss	23/4/35	{ Undertaking not to use the house for human habitation accepted by Council on 3/7/35.
41 Sutton Moss	23/4/35	
23 Sutton Moss	23/4/35	3/7/35
23 Back Sutton Moss	23/4/35	3/7/35
16 Normans Road.....	23/4/35	3/7/35
18 Normans Road.....	23/4/35	3/7/35
20 Normans Road.....	23/4/35	3/7/35
Colliery Yard Cottage, occupied by Alfred Evans, Old Colliery Yard, off Fleet Lane	23/4/35	3/7/35

<i>Description of dwelling-house.</i>	<i>Date Represented</i>	<i>Date Demolition Order made.</i>
Colliery Yard Cottage, occupied by Jane Houlton, Old Colliery Yard, off Fleet Lane	23/4/35	3/7/35
393 Fleet Lane	9/10/35	4/12/35
395 Fleet Lane	9/10/35	4/12/35
397 Fleet Lane	9/10/35	4/12/35
2 The Delves, Broad Oak Road	9/10/35	4/12/35
4 The Delves, Broad Oak Road	9/10/35	4/12/35
4 Tickle Street	9/10/35	{ Undertaking not to use the house for human habitation accepted by Council on 4/12/35.
6 Tickle Street	9/10/35	
39 Front Crab Street	13/11/35	3/1/36
39 Back Crab Street	13/11/35	3/1/36
41 Front Crab Street	13/11/35	3/1/36
41 Back Crab Street	13/11/35	3/1/36
Club House, Boardman's Lane	13/11/35	3/1/36
200 Prescott Road	13/11/35	3/1/36
200 Back Prescott Road	13/11/35	3/1/36
202 Prescott Road	13/11/35	3/1/36
2 Greenough Street	13/11/35	{ Undertaking not to use the house for human habitation accepted by Council on 5/2/36
120 Derbyshire Hill Road	13/11/35	
Caravan occupied by William Swift, in Yard, rear of Hospital Farm, 61 Marshalls Cross Road	13/11/35	3/1/36
Dwelling-house occupied by Lily Lyon, in Rothwell's Yard, Rigby Street	11/12/35	{ Undertaking not to use the house for human habitation accepted by Council on 5/2/36.
1 Hill Place	11/12/35	

Back-to-Back Houses.—Official Representation under Section 19 of the Act was also made regarding the following back-to-back houses on the 23rd April, 1935. In all cases undertakings to convert the premises into through houses were accepted by the Council :—

- 30, Front and Back Woodcock Street.
- 32, Front and Back Woodcock Street.
- 19, Front and Back Sutton Moss.
- 25, Front and Back Sutton Moss.
- 27, Front and Back Sutton Moss.
- 86, Front and Back Baxters Lane.
- 379, Front and Back Fleet Lane.
- 4, Front and Back Worsley Brow.

Re-Housing.—For the re-housing of persons to be displaced from dwelling-houses dealt with under the Housing Act, 1930, the sites allocated to the end of the year were as follows :—

Name of Site	Numbers and Types of Houses to be erected				Providing accommodation for Persons
	2-bedroomed	3-bedroomed	4-bedroomed	Total	
Hardshaw Brook Site	6	20	6	32	166
Rivington Road Site	18	40	2	60	286
Gaskell Street Site	20	38	8	66	326
Virgil Street Site	—	2	—	2	10
Simms Avenue Site	8	20	—	28	132
Boardmans Lane Site	6	20	6	32	166
Sorogold Street Site	12	10	6	28	140

These sites provide accommodation for 1,226 persons in 248 houses. From the commencement of re-housing under slum clearance schemes to the end of the year 555 persons had been rehoused in 119 houses.

Disinfestation of Furniture and Household Effects.—

In all cases where re-housing takes place from premises dealt with under the Housing Act, 1930, furniture and household effects are subjected to fumigation by Hydrocyanic Gas before removal into the new houses, and the bedding is subjected to steam disinfection at the Isolation Hospital.

OVERCROWDING.—

The overcrowding survey, required by the Housing Act, 1935, which came into force during the year, was commenced on December 9th.

A report dealing specially with the overcrowding provisions of the Act was submitted to the Health Committee in November, and is printed in the Appendix.

The scheme of the survey suggested by the Ministry and detailed in the report was adopted by the Council. For the purpose of the survey 10 enumerators were appointed to carry out the preliminary inspections and eight survey assistants for the measurement of rooms. A temporary clerk was also appointed to deal with the clerical side of the survey, and the whole of this staff was placed under the supervision of a sanitary inspector who has had special housing experience.

By the end of the year satisfactory progress had been made and approximately 6,000 houses had been visited by the enumerators.

XVI.—HEALTH EDUCATION.

No special Health Week was held during the year, but health themes have been kept before the public by means of the posters arranged by the Central Council for Health Education. These were displayed on three poster frames taken over from the Empire Marketing Board. Talks to mothers by doctors, dentists and health visitors are also a constant feature of the various maternity and child welfare clinics. During the year special parents' meetings were held at several of the schools for the purpose of discussing with them the benefits of immunisation against Diphtheria.

APPENDIX.

Report by the Medical Officer of Health on the Housing Act, 1935, with special reference to the Survey of Overcrowding.

(Submitted to Health Committee on 13th November, 1935).

The provisions of the new Housing Act, 1935, might be broadly divided into three classes :—

- 1.—Provisions for dealing with overcrowding.
- 2.—Amendments to previous legislation in regard to slum clearance and re-conditioning.
- 3.—Financial provisions.

Financial Provisions.

The main financial provisions in the new Act are provisions for the consolidation of all housing accounts, and provisions for government grants towards the expenses of housing accommodation provided by the Council for the abatement of overcrowding or for re-housing persons displaced in carrying out re-developments. The Ministry have prepared memoranda dealing with these matters.

I do not propose to deal with the question of consolidation of accounts. In regard to grants to be made for re-housing, it would appear that where re-housing is carried out in blocks of flats of not less than 3 storeys erected on a site the cost of which, as developed, exceeds £1,500 per acre, the Ministry will make an Exchequer contribution ranging from £6 upwards per flat according to the cost of the site as developed. Where, however, the Local Authority propose to provide the whole or part of the housing accommodation required, either in cottages (or in flats on sites not exceeding £1,500 per acre), no Exchequer contribution is promised but the Ministry *may* make a grant not exceeding £5 annually for a period not exceeding 20 years in respect of each such house (or flat). Before making such contribution, however, the Ministry have to be satisfied that having

regard to the expenditure already incurred or to be incurred on housing in relation to the resources of the district, the provision of re-housing accommodation for these persons would impose an undue burden on the district by reason of the lowness of the rents it would be practicable to charge or the necessity of providing an unusually high proportion of accommodation for large families.

Amendments to Previous Legislation in regard to Slum Clearance and Re-conditioning.

In the new Act there are several amendments to the present law dealing with clearance areas and individual unfit houses. The chief amendments are :—

- (a) if in a clearance area one or more of the houses have been “ well maintained ” by the owner, compensation may have to be paid for these houses ;
- (b) houses included in a clearance area by reason only of bad arrangement must be excluded from a clearance order. This does not appear to affect many houses in St. Helens ;
- (c) owners may submit proposals for reconditioning of individual houses by works of structural alteration or improvement, and if the proposals are accepted by the Local Authority such houses cannot be included in a clearance order or dealt with as an individual unfit house within certain periods ;
- (d) other buildings cannot be included in a clearance order and would, therefore, have to be purchased and full compensation paid if it is desired that the site be cleared ;
- (e) a clearance area may now include, or may be wholly composed of, property belonging to the local authority themselves, the only restriction being that property may not be included which the local authority have acquired in such circumstances that an obligation rests upon them to submit a re-housing scheme to the Minister ;

- (f) in certain circumstances tents and vans, etc., can now be dealt with ;
- (g) the procedure known in the Act of 1930 as Improvement Schemes has now been abolished and a new procedure—Re-development Schemes—has been instituted for dealing with large overcrowded areas which could be improved by demolishing some of the houses in the area, re-conditioning others and, where necessary, replanning the area as a whole.

The Ministry have issued a special memorandum (Memorandum C) dealing with the procedure to be adopted in these re-development schemes, but the main provisions in regard to them are :—

- (a) that the area contains 50 or more working-class houses ;
- (b) that at least one-third of the working-class houses in the area are overcrowded or unfit for human habitation and not capable at reasonable expense of being rendered fit, or are so arranged as to be congested ;
- (c) that the industrial and social conditions of the district are such that the area should be used to a substantial extent for re-housing ; and
- (d) that it is expedient in connection with the provision of housing accommodation that the area should be re-developed as a whole.

In carrying out such a scheme it is not necessary that the local authority purchase all the houses in the area, as they may make arrangements with the owners of property in the area for carrying out the improvements in accordance with the scheme. It is also provided that owners may themselves bring forward proposals for the re-development of an area, and if such proposals are approved by the local authority and are carried out in accordance with the approved plan and within the time stated, the local authority are debarred from dealing with the property under the Act of 1930 or under the re-development provisions of the new Act.

OVERCROWDING.

The purpose of these provisions is that each authority should get a fairly accurate estimate of the overcrowding in its district and the number of houses required to permit of that overcrowding to be abated ; and that after these houses have been provided it should be illegal for overcrowding to occur in the future. The Ministry have issued a special memorandum (Memorandum B) dealing with these questions and the following is a summary of the main points :—

(a) Survey of Overcrowding :

“ Section 1 of the Act requires every local authority
 “ before such dates as may be fixed by the Minister as respects
 “ their district, to cause an inspection thereof to be made with
 “ a view to ascertaining what dwellinghouses therein are over-
 “ crowded, and to prepare and submit to the Minister a report
 “ showing the result of the inspection ” and of the necessary
 “ action which the local authority proposes to take.

“ Section 2 of the Act prescribes the “ standard of over-
 “ crowding ” to be adopted by all local authorities.

The overcrowding standard consists of two parts. The first part requires that there must be sufficient sleeping accommodation in a house to secure proper separation of the sexes.

The second part is a standard of capacity and fixes, in relation to the accommodation in any particular house, the maximum number of persons, irrespective of sex, who may be permitted to sleep in that house at one time. In calculating this standard of capacity two tests have to be satisfied. The first test may conveniently be described as the “ number ” test (Table 1), whilst the second test (Table 2) may be described as the “ floor area ” test. These standards are contained in the First Schedule to the Act and are as follows :—

Table 1.

<i>Where a house consists of :</i>	<i>The permitted number of persons is :</i>
(a) one room	2
(b) two rooms	3
(c) three rooms	5
(d) four rooms	7½
(e) five rooms or more	10 with an additional 2 in respect of each room in excess of five.

(In using this Table a room less than 50 square feet is not counted as a room).

Table 2.

Where a room in a house has a floor area of :

(a) 110 sq. ft. or more	2
(b) 90 sq. ft. or more, but less than 110	1½
(c) 70 sq. ft. or more, but less than 90	1
(d) 50 sq. ft. or more, but less than 70	½
(e) Under 50 sq. ft.	nil

The standard of accommodation for any house will be the lesser of the two numbers calculated from each of the above tables.

In the application of these tests account is only to be taken of rooms which are normally used in the locality either as a living room or as a bedroom. Sculleries and bathrooms, therefore, would not be counted.

No account is to be taken of children under one year of age, and children between the ages of 1 and 10 years count as half a person.

The Act does not prescribe any particular method in which the survey is to be carried out, nor has a date yet been fixed by the Minister for its completion. In a memorandum just published, however, the Minister has drawn up a scheme which he advises and

which could with advantage be adopted. The Minister also points out that in order to get an accurate picture of the position the survey, once started, should be completed within the shortest possible time, otherwise movement of the population would invalidate the results. I would suggest that a reasonable period for St. Helens would be three months.

The scheme contemplates the survey as being in two parts. Firstly, a house-to-house visitation, obtaining particulars as to the number of rooms in the house and the ages and sexes of the persons occupying it. The results of this survey will be tabulated into three classes in accordance with the standard given in Table 1. These would be houses definitely overcrowded, houses definitely not overcrowded, and houses which because they are near to the limits allowed under Table 1 will possibly be overcrowded when judged by Table 2.

The second part of the survey will follow the first part, though to a large extent running concurrently with it. It will, in the first instance, deal with those houses which, though not overcrowded definitely according to the standard in Table 1, may be overcrowded when judged by the standard in Table 2 (that is, doubtful cases). For this purpose each living and sleeping room of the houses will have to be measured (rules regarding measurement are laid down in the Memorandum and Regulations).

For carrying out the survey in St. Helens it will be necessary to appoint a temporary staff and to provide office accommodation for them.

There are approximately 20,000 houses in St. Helens which will require to be surveyed and it is estimated that one enumerator could reasonably be expected to visit and complete the forms for an average of 250 houses per week. Ten enumerators should, therefore, be able to complete the preliminary survey in a period of approximately 8 weeks. It is not necessary that these persons should have special qualifications, but I would suggest that as there is a considerable amount of clerical work involved only persons with clerical experience be appointed.

For the second part of the survey it is estimated that of the 20,000 houses visited in the first part approximately 8,000 will be doubtful cases or cases definitely overcrowded according to the standard of Table 1. In both instances arrangements will have to be made for the measurement of the rooms in the houses so that the exact extent of the overcrowding may be obtained. Though this part of the survey necessarily follows the first part, it should be possible to commence it within a week or so of the start of the enumerators' work. For carrying it out I would suggest that the persons appointed should have had experience in the measurement of buildings either as surveying assistants or with building trades' qualifications. For the actual survey purposes it is estimated that one assistant could measure the rooms of 100 houses per week, so that based on the figure of 8,000 houses to be measured, eight enumerators could complete the survey in ten weeks. In the Act, however, provision is made whereby an owner can call upon the Council for a certificate stating the permitted number of persons who may occupy his house. It is considered that practically every owner in St. Helens will, in course of time, ask for these certificates, so that it might be advisable even after the survey itself is completed that all working-class houses in St. Helens should be measured. If this were done it would mean that approximately a further 12,000 houses would be measured, giving work for the eight temporary assistants for a further period of 15 weeks.

In addition to the enumerators and surveying assistants mentioned above it will also be necessary to have temporary clerical assistants to deal with the clerical side of the survey, and it is suggested that at least three temporary clerical assistants would be required for the full three months at least.

The whole staff would be supervised by a permanent member of the Sanitary Inspectors' staff who has had housing experience, but I would here mention that as there has been no previous experience by any local authority in the working of a survey of this magnitude or character, the figures given can only be regarded as provisional estimates and may have to be revised when some experience of the working of the survey has been acquired.

The following is an estimate of the cost of the survey in accordance with the outline given above :—

	£	s.	d.
(1) Ten enumerators for a period of eight weeks at a salary of £2/10/0 per week	200	0	0
(2) Eight survey assistants for a period of ten weeks at a salary of £2/10/0 per week	200	0	0
(3) Three clerical assistants for a period of twelve weeks at a salary of £2/10/0 per week	90	0	0
(4) Printing, stationery, postages, &c.	50	0	0
	<hr/>		
Cost of actual survey	£540	0	0
Further period of retention of the eight surveying assistants in order to complete the measurement of all the dwelling-houses in the borough—15 weeks at £2/10/0 per week	300	0	0
	<hr/>		
	£840	0	0
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No allowance has been made in the above estimate for any apportionment of the salary of the member of the staff who would supervise.

(b) Re-housing :

The local authority are only required to submit proposals for new housing accommodation if they are satisfied that this accommodation will not otherwise be provided, but as it is anticipated that the survey will show a considerable number of houses in St. Helens are overcrowded it is presumed that this deficiency will not be met by private enterprise or by any arrangements made with Housing Associations. When the results of the survey are reported to the Ministry, therefore, there should accompany the report a statement showing the local authority's proposals for the provision of houses to abate the overcrowding. As previously mentioned the Ministry in

certain circumstances will give a grant towards these houses. I would suggest that the actual provision of the houses will be a matter for the Housing Committee, the Health Committee being the authority to indicate the number of houses required. It might be mentioned, however, that the number of houses actually required to be built will not necessarily be the number required for the abatement of overcrowding as shown in the survey, because from that number will have to be deducted, (1) overcrowded houses coming within the slum clearance programme ; (2) houses vacated as the result of the provision of alternative accommodation ; (3) houses vacant at the time of the survey ; and (4) the estimated number of new houses which will be built by private enterprise or by the Council under other proposals. It seems, therefore, that until the survey is completed it will be extremely difficult to give any indication of the number of new houses required for the new scheme for the abatement of overcrowding. The Minister suggests, however, that where the amount of re-housing shown to be necessary is small, the local authority should submit specific proposals for the building of the total number of houses. Where, however, a substantial amount of re-housing is indicated as being required, the local authority should in the first instance submit specific proposals providing for only a proportion of the total number.

He also suggests that before submitting an application for financial assistance for re-housing purposes, local authorities should complete the overcrowding survey and their estimate of the new houses which they will probably have to provide.

(c) Prevention of Future Overcrowding :

After the survey has been completed, and after the houses necessary for the abatement of the overcrowding indicated in the survey have been provided, the Minister will fix a date after which the overcrowding—unless it existed on the

appointed day and alternative accommodation has not been offered—will be an offence punishable by fine on the part of the occupier who causes it and the landlord who permits it. There is, however, special protection given in cases where overcrowding is due to births, increases in ages, or is temporary, as, e.g., a member of the family returning home for a short stay. The Minister also has power on the application of a local authority to modify temporarily the overcrowding standard in a district or any part of a district and, further, the local authority themselves can in exceptional circumstances grant a licence to an occupier permitting the number of persons in excess of the permitted number to sleep in a house. Further, it is the duty of a landlord or his agent, under penalty, to inform the local authority when after the appointed day he knows that his house has become overcrowded since the appointed day.

A second appointed day will also be laid down by the Minister six months after which a landlord must have inserted in his rent book a statement of the number of persons permitted to occupy the house. For this purpose he can apply to the local authority for information of the number of persons permitted to occupy the house, and the local authority are bound to supply this. As already mentioned it is expected that practically every landlord in St. Helens will ask for this information. As already suggested the measurement necessary to give this information might be taken as part of the survey.

Note.—Section 7 of the Act empowers a local authority to publish information for the assistance of landlords and occupiers of dwellinghouses as to their rights and duties in regard to the new overcrowding provisions. These powers should be utilised.

